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ABSTRACT

This curriculum is comprised of 31 instructional units divided into eight subject areas: orientation (6 units), anatomy and physiology (6 units), dental histology (1 unit), microbiology and bacteriology (2 units), pharmacology (2 units), chairside assistance (9 units), roentgenology (2 units), and practice administration (3 units). Each instructional unit follows a typical format comprised of eight components: performance objectives, suggested activities for teacher, information sheets, assignment sheets, job sheets, transparency masters, tests, and answers to test and assignment sheets. (LRA)

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HEALTH OCCUPATIONS EDUCATION

Dental Assistant

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STILLWATER, OKLAHOMA

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Dental Assistant
Basic Core

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Developed by the
Curriculum and Instructional Materials Center
For the division of Health Occupations Education
Oklahoma State Board of Vocational and Technical Education
Mary Randall, State Supervisor
Leslie Fisher, Chairman
Francis T. Tuttle, Director
Bob Patton, Coordinator, Curriculum and Instructional Materials Center
1981

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BASIC CORE

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FOREWORD

We believe that the most effective way to improve vocational education is through the development and use of good, sound instructional materials. *Dental Assistant: Basic Core* is designed to provide the basic knowledge and skills for preparing "job-ready" dental assistants. This publication focuses on the following areas: Career Orientation; Developing Leadership; Terminology; Chairside Assisting; and Office Procedures.

In Oklahoma our vocational dental assistant programs are designed for one academic year or approximately 530 hours of training. It is impractical to attempt to include everything that a well-trained dental assistant should know into one curriculum product or one training program. We feel that this material represents the theoretical aspects of the subjects as well as practical application. The theoretical aspect of the curriculum should provide content necessary for students to make judgments regarding the procedures they are expected to perform and to anticipate the dentist's needs during procedures which are usually performed in general dentistry practices.

We are especially proud of the intense involvement and support of professional dental personnel. Furthermore, based on the writer's experiences as a dental assistant and dental assistant instructor, Dollie Hefner uniquely combined key curriculum content and learning experiences which should provide the foundation for the dental assistant student to continue formal education, independent study and professional growth. The teaching-learning process promises to be facilitated for "dental assistants-to-be" because of the professional input and expertise of the curriculum writing team.

We believe strongly that *Dental Assistant: Basic Core* will help dental assistant instructors to improve their programs. As instructors "bring to life" the contents in the vocational setting, the student is sure to become "job-ready" for the occupation of dental assistant.

Francis T. Tuttle, State Director
State Department of Vocational and
Technical Education

Mary Randall, State Supervisor
Health Occupations Education

PREFACE

The purpose of *Dental Assistant: Basic Core* is to prepare students to function effectively as an integral member of the dental health team and to perform chairside assisting and related office and laboratory procedures under the direction and supervision of the dentist. The inpact of the well-trained dental assistant is two-fold: first, the dental assistant conserves or extends time, energy, and economics for the dentist; secondly, and perhaps more importantly, the dental assistant provides the second pair of hands needed for the practice and performance of quality dentistry.

Dental Assistant: Basic Core can be likened to a bank. This "bank" of dental assistant skills and knowledges provides the "principal" from which students and instructor both borrow and lend. In the *Dental Assistant: Basic Core* bank objectives, information sheets, assignment sheets and job sheets are checked out to students to help them master the competency levels of a job-ready dental assistant. The "interest" is generated through the instructor's ability and commitment to localize, personalize, supplement, and motivate. The suggested activities pages are a wealth of ideas from which the instructor can draw. Furthermore, because *Dental Assistant: Basic Core* organizes the theory aspects of dental assisting with practical application, savings and dividends are accrued because more can be taught in less time. The big pay-off comes when the assignment sheets, job sheets, and tests are used to evaluate the degree to which each student has mastered objectives.

It is your responsibility as a dental assistant instructor to help our bank, *Dental Assistant: Basic Core* to prosper. Remember. . ."Teaching is leaving a part of one's self in the development of another; surely, the student is also a bank where you deposit your most precious treasures."

Dollie Hefner

6-A

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Planning and Reviewing Committee

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I would like to express my appreciation to R.B. Ogle, D.D.S., for encouraging me to become a dental assistant and educator.

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Staff Members of the Curriculum and Instructional Materials Center

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USE OF THIS PUBLICATION

Instructional Units

Dental Assistant: Basic Core includes eight sections and thirty-one instructional units. A standard format was established in 1970 for development of instructional materials for all Oklahoma vocational teachers. This format includes eight basic components which form a unit of instruction: performance objectives, suggested activities for teacher, information sheets, assignment sheets, job sheets, transparency masters, tests, and answers to tests and assignment sheets. Depending on the specific objectives, transparency masters, assignment sheets, and job sheets may or may not be included in the unit of instruction.

All of the unit components "zero in" toward measurable and observable learning outcomes. Teachers are encouraged to supplement, personalize, localize, and motivate with these materials in order to develop a complete teaching-learning process.

Units of instruction are designed for use in more than one lesson or class period of instruction. Careful study of each unit of instruction by the teacher will help him or her determine:

A. Amount of material that can be covered in each class period
B. Skills which must be demonstrated
   1. Supplies and equipment needed
   2. Amount of practice needed
   3. Amount of class time needed for demonstrations
C. Supplementary materials, such as pamphlets and filmstrips, that must be ordered
D. Resource people who must be contacted

Performance Objectives (white pages)

Each unit of instruction is based on the performance needed for successful employment in an occupational area. Performance objectives are stated in two forms: unit objectives, stating the subject matter to be covered in a unit of instruction, and specific objectives, stating the student performance necessary to reach the unit objective.

Since the objectives of the unit provide direction for the teaching-learning process, it is important that the teacher and students have a common understanding of the intent of the objectives. Following is a list of performance terms, their meanings, and behavioral synonyms which may have been used in this material.

A. Name--The individual supplies a name for objects, events, or people

Behavioral synonyms: Label, list, letter, record, reiterate, repeat, write

B. Identify--The individual selects a named, described, or pictured object by pointing to it, touching it, picking it up, or selecting it

Behavioral synonyms: Select, mark, match, choose, judge

C. State a rule--The individual communicates a relationship or principle which could be used to solve problems or perform a task

D. Apply a rule--The individual supplies an answer to a problem by using a stated relationship or principle

Behavioral synonyms: Solve, calculate

E. Describe--The individual relates sufficient characteristics or properties of an object or event so that a second individual will be able to state what is being discussed

Behavioral synonyms: Define, discuss, interpret, recite, tell how, tell what happens when

F. Distinguish--The individual selects an object or event from two or more which are easily confused

Behavioral synonyms: Discriminate, differentiate

G. Order--The individual arranges three or more objects or events in a sequence based on a stated property

Behavioral synonyms: Arrange, sequence, list in order, classify, divide, isolate, sort

H. Construct--The individual makes a physical object, a verbal statement, or a drawing

(NOTE: Construct is used when the finished product or result is important.)

Behavioral synonyms: Draw, make, build, design, formulate, reproduce, transcribe, convert, put together, compile

I. Demonstrate--The individual performs several operations necessary to carry out a specified process

(NOTE: Demonstrate is used when it is desirable to watch the student perform a task, one of the highest levels of student performance.)

Behavioral synonyms: Show your work, show procedure, perform an experiment, perform the steps, operate, remove, replace, turn off/on, (dis) assemble, (dis) connect

The objectives should be provided for students and stressed throughout the teaching-learning process. This will help answer any questions concerning performance requirements for each instructional unit. The objectives can also help determine teaching strategies and instructional methods. Prepare for each unit by deciding how each objective can best be taught.

The objective sheet may be also used as a quick pretest to determine prior knowledge of students and if further study or activities are necessary. Teachers should feel free to modify, delete, or add objectives in order to meet the needs of the students and community. When changes in objectives are made, the teacher should remember to supply the needed information, assignment and/or job sheets, and criterion test items.

Suggested Activities (pink pages)

This component is included only in teacher material. The suggested activities page assists teachers during the preparation stage of the teaching-learning process by providing suggestions for delivery and/or presentation during the instructional process. Read the suggested activities before teaching the units so supplemental materials can be obtained, audio-visual materials prepared, and outside resources contacted. Duties of the teacher will vary according to the particular unit.

The references that are listed are ones used in the development of each unit. They should be used by the teacher to supplement her or his knowledge of the subject area or to help students with particular interest or occupational objective in the area covered.

Information Sheet (green pages)

The information sheet provides "must know" content essential for meeting the cognitive (knowledge level) objectives of the unit. The information is written in a topical outline form and is keyed to the specific objectives.

Teachers will find that the information sheet serves as an excellent guide for presenting background knowledge necessary to develop the skills specified in the unit objective. The information sheet may also be used for coordination activities and advisory committees.

Students should read the information sheet before the information is discussed in class. Space is provided in margins for students and teachers to add notes that supplement, localize, personalize, and provide motivation for each unit.

Transparency Masters (white pages in teacher material and green in student material)

Transparency masters provide information in a special way. The students may see as well as hear the material being presented, thus reinforcing the learning process. Transparencies may present new information or they may reinforce information presented in the information sheet. They are particularly effective when identification is necessary.

Transparencies should be made and placed in the notebook where they will be immediately available for use. Transparencies direct the class's attention to the topic of discussion. It is recommended that teachers stand away from the overhead projector when discussing transparency material to avoid speaking too loudly.

Assignment Sheets (brown pages)

Assignment sheets give students a chance at problem solving, self-assessment, and/or practical experience with the information. They assist students in the application of knowledges which are necessary prerequisites to skill development. These may be given to the student for completion in class or used for homework assignments. Answer sheets are provided when appropriate and can be used by the student and/or teacher for checking student progress.

Job Sheets (blue pages)

Job sheets are another important segment of a unit of instruction. The job sheets provide a list of equipment, tools, and materials needed to complete a manipulative or psychomotor skill. They describe a step-by-step procedure needed to complete each task or job. Diagrams, photographs, and illustrations are provided to assist students in achieving the skill.

Instruments in job sheets are not in order of use. This should be taught in the classroom. In this way, students will not depend entirely on job sheets for instrument setup.

A teacher should demonstrate to students the procedures outlined in each job sheet. Furthermore, the teacher needs to localize the job sheet accordingly to the equipment and supplies available in the local lab or shop situation. Job sheets also furnish potential employers with a picture of the skills being taught and the performances they might reasonably expect from a person who has had this vocational instruction.

Tests (yellow pages)

This component provides criterion-referenced evaluation of every objective listed in the unit of instruction. It is crucial to note that both paper-pencil and performance objectives must be evaluated.

The tests may be written or oral. It is recommended that the tests be divided into shorter tests covering three or four objectives at a time and given soon after those objectives have been covered. A selection of questions from the units covered may be used for final tests at the end of each term if desired. If objectives have been added, deleted, or modified, be sure to make the changes on the test.

The acceptable response on a unit test, eighty-five percent in most units, may be raised or lowered to fit the topic or students' ability levels. The percentage applies to the overall score, not to each individual question. The final unit grade should be obtained by using the "paper-pencil" score along with teacher evaluations of student demonstrations of the desired skills.

Answers to Test and Assignment Sheets (pink pages)

These components are designed to assist the teacher in evaluation of student performances.

Page Numbering

Each publication from the Curriculum and Instructional Materials Center is assigned a specific abbreviation. For example, *Dental Assistant: Basic Core* has been abbreviated DA. The units are then numbered consecutively within each section. An example of a page number is DA - 1-A. Since CIMC publications are loose leaf, this system of page numbering was adopted so pages from different manuals would not get mixed up.

Methods of Disseminating Material

Material may be given out a unit or page at a time to keep the material before the students always new. Some teachers ask students to furnish a three-ring binder for the units while studying a particular unit. This is more convenient for taking the material home to study. Each unit is then placed in the larger binders upon its completion. The large binders may be purchased at cost from the CIMC. Some teachers have stored the materials by units in filing cabinets or boxes until needed for use. All the units may be given out at once if desired.

Student materials should be provided for each student for best results. They may be purchased in-state for less than a teacher can reproduce the materials, especially when the teacher's time is considered. Student materials contain everything but the test answers, answers to assignment sheets, and suggested activities. The tests are collated all together at the back of student material and should be removed and stored until needed. The students should be allowed to take their materials home at the end of the year.

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Teaching Methods

It is a challenge to keep students motivated. Supplement the objectives by providing the "why," personal experiences, and current information. Prepare for each unit by deciding how each objective can best be taught. Allow students to become involved in preparing and planning.

ORIENTATION AND COMMUNICATION
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to draw conclusions about duties, educational requirements, characteristics, responsibilities, and job opportunities of the dental assistant. The student should also be able to avoid communication obstacles, give directions, and evaluate voice qualities. This knowledge will be evidenced through completion of assignment sheets and unit test with a minumum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with orientation and communication to the correct definitions.
2. List purposes of dentistry.
3. Write meanings of dental degrees and associations.
4. Distinguish between duties of dental health team.
5. Describe educational requirements of dental health team.
6. Match specialized fields of dentistry to the correct descriptions.
7. List sources of job opportunities for dental assistant.
8. List characteristics of a good dental assistant.
9. Select from a list responsibilities of dental assistant.
10. Label seals of dental health team.
11. List types of communication.
12. Select from a list factors necessary for effective communication with auxiliary personnel and patients.
13. Select from a list ways to carry on casual conversation.
14. Distinguish between positive and negative gestures and expressions.
15. Recognize obstacles to communication.
16. Give orders, directions, and instructions.

17. Analyze voice qualities.
18. Investigate expanded functions of dental assistant.
19. Interview dental health team.

ORIENTATION AND COMMUNICATION
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Order films.

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   D. Make transparencies.

   E. Discuss unit and specific objectives.

   F. Discuss information and assignment sheets.

   G. Use next page to give students a brief history of American dentistry.

   H. Lead a discussion on the functions of the layout of a dental office.

   I. Invite specialized dentistry professionals to speak to class about their areas of expertise.

      (NOTE: Students could also complete Assignments Sheets #4 and #5 if field trips are not available.)

   J. Take a field trip to different dental offices to compare various types of equipment and office layouts; distinguish between group and private practices.

   K. Assign posters to depict the various dental professions.

   L. Role play body language.

   M. Provide recorder for voice analysis.

   N. Discuss ways dental assistants can become Certified Dental Assistants in their state(s).

   O. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

4-A

EARLY AMERICAN DENTISTRY

1812: Gold leaf had been introduced as a filling material, but it had limited application until the dental engine became available.

1839: The *American Journal of Dental Science,* edited by Chapin A. Harris, started publication.

1840: The Baltimore College of Dental Surgery, the cradle of dental education, was the first dental school in the United States. It was founded and organized by Drs. Horace H. Hayden and Chapin A. Harris.

1840: The American Society of Dental Surgeons, considered the parent of all dental associations, was organized with Horace H. Hayden as the first president.

1841: Alabama was the first state to pass restrictive laws governing the practice of dentistry.

1842: Virginia organized the first state dental association, followed by Pennsylvania in 1845, and by New York in 1847.

1842: Georgia, through the efforts of Dr. Crawford W. Long, was the site of the first surgical operation in the history of the world under general anesthetic. Dr. Long was the discoverer of ether as a general anesthetic.

1844: Dr. Horace Wells, a practicing dentist in Hartford, Connecticut, was the first to use nitrous oxide as a general anesthetic.

1844: White, the founder of S.S. White Company, started to manufacture porcelain teeth on a large scale.

1844: Charles Goodyear received his first patent on rubber vulcanization, but he was not interested in dentistry. Cummings in 1864 realized the patents on the manufacturing of dental plates (dentures).

1854: Mrs. Emeline Rubert Jones of Connecticut became the first woman to practice dentistry. During this period, individuals in this country generally received their education and training through preceptorship, wherein a dentist would provide on-the-job training for a select young man or woman.

1856: Dr. Lucy Hobbs was the first woman to graduate from a dental college in this or any country. While she was a resident of Iowa, her degree was granted from the Ohio Dental College.

1871: Morrison invented the dental engine. It was not until Singer and Howe had developed the sewing machine that the dental engine was conceived. The dental engine ushered in the "Golden Age" of dentistry, since this mechanism provided precision and more rapid cutting procedures of the teeth for gold restorations such as inlays, crowns, and bridges. The actual casting of gold restorations, of course, was to be realized some 30 years later.

1907: Dr. William H. Taggart, a Chicago dentist, invented the cast inlay. This invention provided the way and direction for cast gold restorations which now are used commonly in dentistry.

Used with permission of the University of North Carolina from *Dental Assisting: Course I. Orientation in the Dental Profession and Office*, copyright 1970, pp. 3-22 and 3-23.

C. Transparency masters

   1. TM 1--Seals of the Dental Health Team

   2. TM 2--Communicating

   3. TM 3--Two-Way Conversation

D. Assignment sheets

   1. Assignment Sheet #1--Recognize Obstacles to Communication

   2. Assignment Sheet #2--Give Orders, Directions, and Instructions

   3. Assignment Sheet #3--Analyze Voice Qualities

   4. Assignment Sheet #4--Investigate Expanded Functions of Dental Assistant

   5. Assignment Sheet #5--Interview Dental Health Team

E. Test

F. Answers to test

III. Unit references:

A. *Dental Assisting: Course I. Orientation in the Dental Profession and Office.* 3rd ed. Chapel Hill: University of North Carolina School of Dentistry and Extension Division, 1980.

B. Schwarzrock, Shirley Pratt, and Jenson, James R. *Effective Dental Assisting.* Dubuque, Iowa: William C. Brown Company, 1976.

C. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W.B. Saunders Co., 1976.

D. Nelson, Frank. *Group Instruction for Cooperative Programs.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1978.

E. Fast, Julius. *Body Language.* New York: Simon and Schuster, Inc., 1973.

F. Post, Elizabeth L. *Etiquette.* 12th ed. New York: Funk and Wagnalls, 1969.

IV. Films:

A. "A Bright Future." (Order #DHC-75)

B. "Dental Assistant: A Career of Service." (Order #DHA54)

(NOTE: "Dental Assistant: A Career of Service" is a two-part film. The first segment is 14 minutes, and the second is 20 minutes. The rental charge is $3.00 for each segment. It is available from the American Dental Association, Bureau of Audio Visual Service, 211 East Chicago Avenue, Chicago, IL 60611.)

C. "Successful Persuasion." Available from National Educational Media, Inc., 15250 Ventura Boulevard, Sherman Oaks, California 91403.

(NOTE: This film is available on a free-loan basis to Oklahoma teachers from the State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1515 West Sixth, Stillwater, OK 74074. Out-of-state teachers may order the film from the above address.)

E. "You - In Public Service: Oral Communication." Available only to Oklahoma teachers from the Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1515 West Sixth, Stillwater, Oklahoma 74074.

ORIENTATION AND COMMUNICATION
UNIT I

INFORMATION SHEET

I. Terms and definitions

  A. Dental auxiliary utilization program (D.A.U.)--Training program designed to teach the dentist and the auxiliary to work together with maximum efficiency

  B. Group practice--Variety of general practitioners and specialists working together in a shared facility

  C. Control assistant--Person responsible for preventive dentistry programs

  Example: Instruction in plaque control, diet and nutrition, and all phases of preventive dentistry

  D. Expanded function dental assistant--Dental assistant who has received extra training and may assume additional responsibilities as permitted by state law

  E. Coordinating assistant--Serves as assistant wherever needed in the office

  F. Secretarial assistant--Responsible for maintaining an efficient dental business office

  G. Business manager or administrator--Employed by group practice for all nonprofessional administrative responsibilities

  H. Prophylaxis--Process of mechanically cleaning debris from surface of teeth to prevent dental disease

  (NOTE: Prophylaxis is called "prophy" in the dental office.)

  I. Periapical--Area surrounding the root apex of a tooth

  J. Periodontal ligament--Anchoring ligament and tissue that holds teeth in position

  K. Malocclusion--Incorrect position of the teeth resulting in faulty meeting of teeth or jaws

  L. Extraction--Act of removing teeth

  M. Perception--Receiving of incoming signals

  N. Evaluation--Interpretation of message received

INFORMATION SHEET

- O. Empathy--Ability to understand feelings of others
- P. Intelligence--Basic ability to communicate
- Q. Listening--Requires the use of all the special senses

II. Purposes of dentistry

- A. Maintain good oral health
- B. Aid in ability to masticate (chew) food

  (NOTE: You need to keep your own teeth in order to masticate foods well.)

- C. Maintain and improve personal appearance

  Examples: Braces, appliances, new dental materials

- D. Correct malfunctions
- E. Prevent oral disease and pain
- F. Diagnose diseases of body systems

  Examples: Diabetes, nerve disorders, nutritional deficiencies

III. Meanings of dental degrees and associations

- A. A.D.A.--American Dental Association
- B. A.D.A.A.--American Dental Assistants Association
- C. C.D.T.--Certified Dental Technician
- D. D.D.S.--Doctor of Dental Surgery
- E. D.M.D.--Doctor of Medical Dentistry

  (NOTE: Some universities grant D.D.S. degrees while others grant D.M.D. degrees, both of which generally require six years of education beyond high school level.)

- F. B.S.--Bachelor of Science
- G. M.S.--Master of Science

INFORMATION SHEET

IV. Duties of dental health team

(NOTE: The list here of duties of the dental health team does not include all duties.)

A. Dental assistant

1. Assists in secretarial procedures
    - a. Schedules appointments
    - b. Answers telephone
    - c. Maintains patients' records
    - d. Arranges methods of payments
    - e. Maintains tax records
2. Assists in chairside procedures
    - a. Prepares and dismisses patients
    - b. Prepares patients for examination, treatment, or surgery
    - c. Assists dentist in operative procedures
    - d. Provides instruction in dental health education

      Examples: Oral hygiene, nutritional counseling
    - e. Performs laboratory duties

B. Dental hygienist

(NOTE: The dental hygienist works under the supervision of a licensed dentist but is most often self-employed.)

1. Performs prophylaxis
2. Provides diagnostic aid for dentist
3. Provides instruction in dental health education

C. Dental laboratory technician--Performs mechanical and technical tasks of prosthesis according to dentist's prescription

Examples: Bridge, partial denture, denture

INFORMATION SHEET

V. Educational requirements of the dental health team

  A. Dentist

    1. Attends minimum of two years of liberal arts college

    2. Attends A.D.A. approved college

    3. Passes written and practical examinations

    (NOTE: Most A.D.A. colleges require three or four years of study for general practice and advanced study of two or three years for specialty practice.)

  B. Certified dental assistant

    1. Completes one or two years of A.D.A. approved school

    2. Passes written and practical examinations

    3. Is employed as a dental assistant for one or two years

    Example: One year of school, two years of office training or two years of school and one year of office training

    4. Holds A.D.A. active membership

    (NOTE: A B.S. or M.S. degree is offered to the dental assistant through higher education.)

  C. Dental hygienist

    1. Attends two years accredited college in dental hygiene

    2. Passes written and practical examinations

    (NOTE: A B.S. or M.S. degree is offered in dental hygiene.)

  D. Dental laboratory technician

    1. Completes two or four years of C.D.T. approved school

    2. Passes written and practical examinations

    3. Is employed five years before taking C.D.T. exam

VI. Specialized fields of dentistry

  A. Dental public health--Deals with dental health problems through education, prevention, and correction on a community, state, or national level

INFORMATION SHEET

B. Endodontics--Deals with diagnosis and treatment of diseases of pulp and periapical tissue

C. Orthodontics--Deals with causes, prevention, treatment, and corrections of irregularities or malocclusion of teeth and arches

D. Oral pathology--Deals with treatment of conditions causing or resulting from morbid anatomic or functional changes in the structure of the mouth

E. Oral surgery--Deals with the extraction of teeth, including diagnosis and surgical intervention in diseases, defects, and injuries of the human teeth and jaws, and any surgical facial structures

F. Pedodontics--Deals with the oral treatment of children

(NOTE: This is a program of complete oral health care up to 12 years of age.)

G. Periodontics--Deals with the diagnosis, prevention, and treatment of diseases of the teeth and supporting tissues

Examples: Periodontal ligament, gingiva, alveolar bone and cementum

H. Prosthodontics--Deals with the replacement of lost or absent natural teeth and artificial substitutes

Examples: Partials, dentures, bridges

VII. Job opportunities for dental assistant

A. Private practice

(NOTE: Private practice is also called solo practice.)

B. Group practice

C. Specialty practice

D. Hospital dentistry

Examples: Out-patients, in-patients

E. Public health dentistry

Examples: Federal, state, local

F. Armed forces

INFORMATION SHEET

G. Dental schools

(NOTE: The assistant teaches instrument exchange to the dentist before or upon graduation.)

H. Volunteer service

I. Dental assistant educator

VIII. Characteristics of good dental assistant

(NOTE: The dentist pays the salary of the dental assistant and has the right to expect certain performances and attitudes to be displayed.)

A. Cooperative

Examples: Helping other auxiliary personnel, if permissible, when duties are completed; seeing things that need to be done without being told

B. Shows initiative

Example: Taking on additional duties which require more responsibility and more advanced skills

C. Honest

Examples: Starting to work on time; returning from breaks and lunch on time; being productive while at work; not leaving work a few minutes early; not taking stamps, pens, paper, and instruments for personal use; not stealing money and/or dental products; not giving special favors or discounts to friends and relatives without the dentist's approval; discouraging friends from being dishonest

D. Willing to learn

(NOTE: Approaching a class and job with an open mind will make the tasks more interesting.)

E. Follows directions

(NOTE: Listening and reading instructions will save time and effort.)

F. Neat appearance and good grooming

G. Smiles

H. Doesn't talk too much

Example: Avoid personal conversations on phone or with patients

INFORMATION SHEET

I. Polite

Examples: Courteous, well-mannered, considerate; saying "good morning" and "thank-you;" acknowledging patients' arrivals; taking coats; offering magazines; giving approximate time dentist will be ready for appointment

J. Patient

K. Able to leave personal problems at home

L. Good attendance

(NOTE: Employers frequently cite excessive absences as a major employee problem.)

M. Dependable

(NOTE: Completing a task on schedule is a sign of maturity, perseverance and responsibility.)

N. Enthusiastic

(NOTE: Acting excited and eager about your job will often cause everyone to get more work done quickly and easily.)

O. Accepts criticism well

(NOTE: It is impossible to do everything correctly all the time. Occasionally everyone must accept criticism. Do not make excuses, but look the dentist in the face and try not to be hurt, sulky, or mad.)

P. Loyal

Examples: Keep confidential matters, such as prices of dental materials and services, to yourself; do not participate in gossip and disputes; avoid criticizing the office or office mates to outsiders

Q. Sense of humor

(NOTE: People who can laugh, especially when the joke is on them, will gain the acceptance of auxiliary personnel and patients.)

R. Positive attitude

(NOTE: Look for what is good and right about something or someone. Avoid complaining or focusing on what is unpleasant. Avoid using words such as "can't" or "don't." Act happy and enthusiastic and you will be more happy and enthusiastic because actions occur before feelings. Do not permit negative attitudes of auxiliary personnel or patients to trap you into their way of thinking.)

INFORMATION SHEET

S. Lack of jealousy

T. Tactful

IX. Responsibilities of dental assistant

A. Keep information concerning patients confidential

Example: "Mrs. Jones had a root canal today; I'm afraid from the looks of her X-rays she'll lose two teeth."

B. Leave personal problems at home

C. Use diplomacy in dealing with people

D. Be punctual

(NOTE: Assistants should arrive one-half hour before the dentist to make necessary preparations so that work can begin immediately when dentist arrives.)

E. Relieve dentist of unnecessary responsibilities

F. Show concern for patients' comfort

G. Explain operative procedures

(NOTE: Explaining operative procedures helps to alleviate patient anxiety. Patients should be instructed as to what procedures will be performed and who will perform them.)

H. Seek ways to improve office procedures

I. Be efficient

(NOTE: Try to anticipate your dentist's needs and have everything ready.)

X. Seals of the dental health team (Transparency 1)

A. Dentistry

B. Dental hygienist

C. Certified dental assistant

D. Certified dental technician

INFORMATION SHEET

XI. Types of communication

(NOTE: In the dental health field, communications are approximately 70% gestures and expressions, 23% written, and 7% verbal.)

A. Gestures and expressions

(NOTE: Eye-to-eye contact, movement of hands or head, and facial expressions successfully relay communications.)

B. Written

C. Verbal

(NOTE: Often the tone, accent, pause, or emphasis tells more than the actual words spoken.)

XII. Factors necessary for effective communication with auxiliary personnel and patients (Transparency 2)

A. Avoid meaningless, trite phrases

(NOTE: Do not assume everyone understands what is meant by common words. Be as specific as possible.)

Example: Words such as "great," "fine," "nice," "bad," "cheap," and "cool" mean different things to different people

B. Avoid slang

Examples: Honey, Dearie, Hey Doc, Gramps, Pops, Hey Boy

(NOTE: Slang terms used with your friends are usually inappropriate in the office or with adults.)

C. Pronounce words distinctly

Examples: Wasjuhavimmind? (What did you have in mind?) Weryasit? (Where is it?)

D. Be sure terms are interpreted the same way by both the assistant and the patient

Examples: Time and amount of payment, gold filling vs alloy

E. Use proper English

INFORMATION SHEET

XIII. Ways to carry on casual conversation (Transparency 3)

A. Ask questions to discover other person's interests

Examples: Children, gardening, sports

B. Avoid subjects such as religion and politics

C. Avoid repeating annoying words and phrases

Examples: "You know," "uh huh"

D. Never monopolize the conversation

(NOTE: A rule of thumb is not to talk more than one minute without giving someone else an opportunity to participate.)

E. Learn the art of listening

F. Use the person's name often

(NOTE: A person's name is the most beautiful word in his/her vocabulary.)

G. Use complimentary phrases often

H. Avoid using hands too much while talking

XIV. Gestures and expressions

A. Positive gestures and expressions

(NOTE: Movements of the body help us express ourselves to others. Our posture often communicates our true feelings better than words. It should be remembered, however, that body language is a general indicator. A single gesture should not be considered by itself, in only a single situation, or separate from the words spoken. Also, meanings of gestures will vary with cultural backgrounds. This list is not meant to be conclusive.)

1. Open, friendly--Open palms
2. Aggressive--Hands on hips
3. Complete control--Head held high
4. Cheerful--Arms swinging freely
5. Poised--Feet flat on floor while sitting

INFORMATION SHEET

6. Graceful--Legs crossed at ankles with hands in lap

7. Pleasant--Smiling

8. Attentive--Eye contact

9. Energetic--Shoulders upright

B. Negative gestures and expressions

1. Lack of confidence--Nervous gestures

   Examples: Tapping, cracking knuckles, wringing hands, tugging at or twisting hair and mustache, rapid blinking of eyelids, biting lips, scratching, licking lips, tugging at collar or tie, puckering lips, twisting mouth, swaying, smacking lips, clearing throat

2. Hostile--Closed fist

3. Lack of ambition--Shrugged shoulders

4. Bashful--Head hung down

5. Restless--Moving around in chair

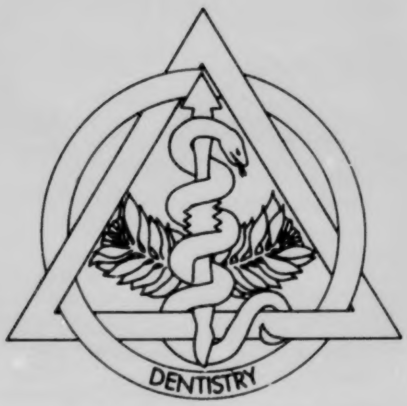
6. Anxious--Shuffling papers

7. Angry, disgusted--Hand on side of waist or lips pressed tightly

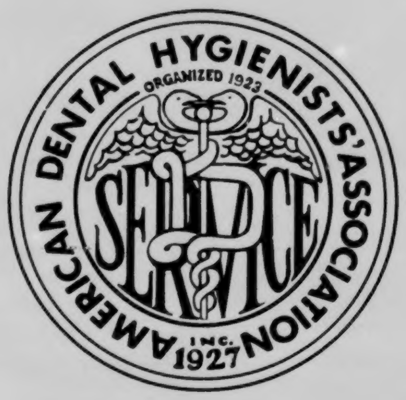
8. Pouting, sulking--Protruding lower lip

9. Surprise, doubt--Raised eyebrows

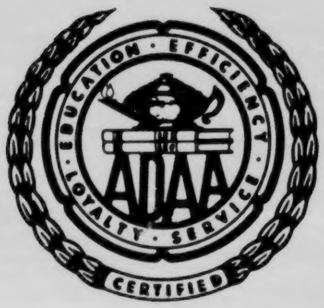
Seals Of The Dental Health Team



Dentistry

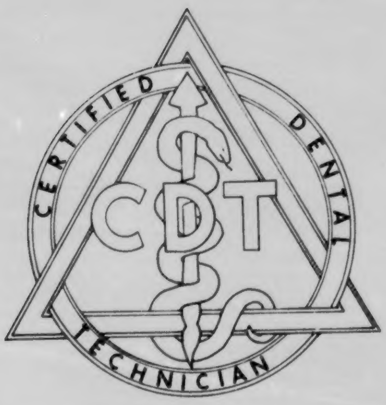

AMERICAN DENTAL HYGIENISTS' ASSOCIATION
ORGANIZED 1923
SERVICE
INC.
1927

Dental Hygienist


EDUCATION · EFFICIENCY · LOYALTY · SERVICE
ADAA
CERTIFIED

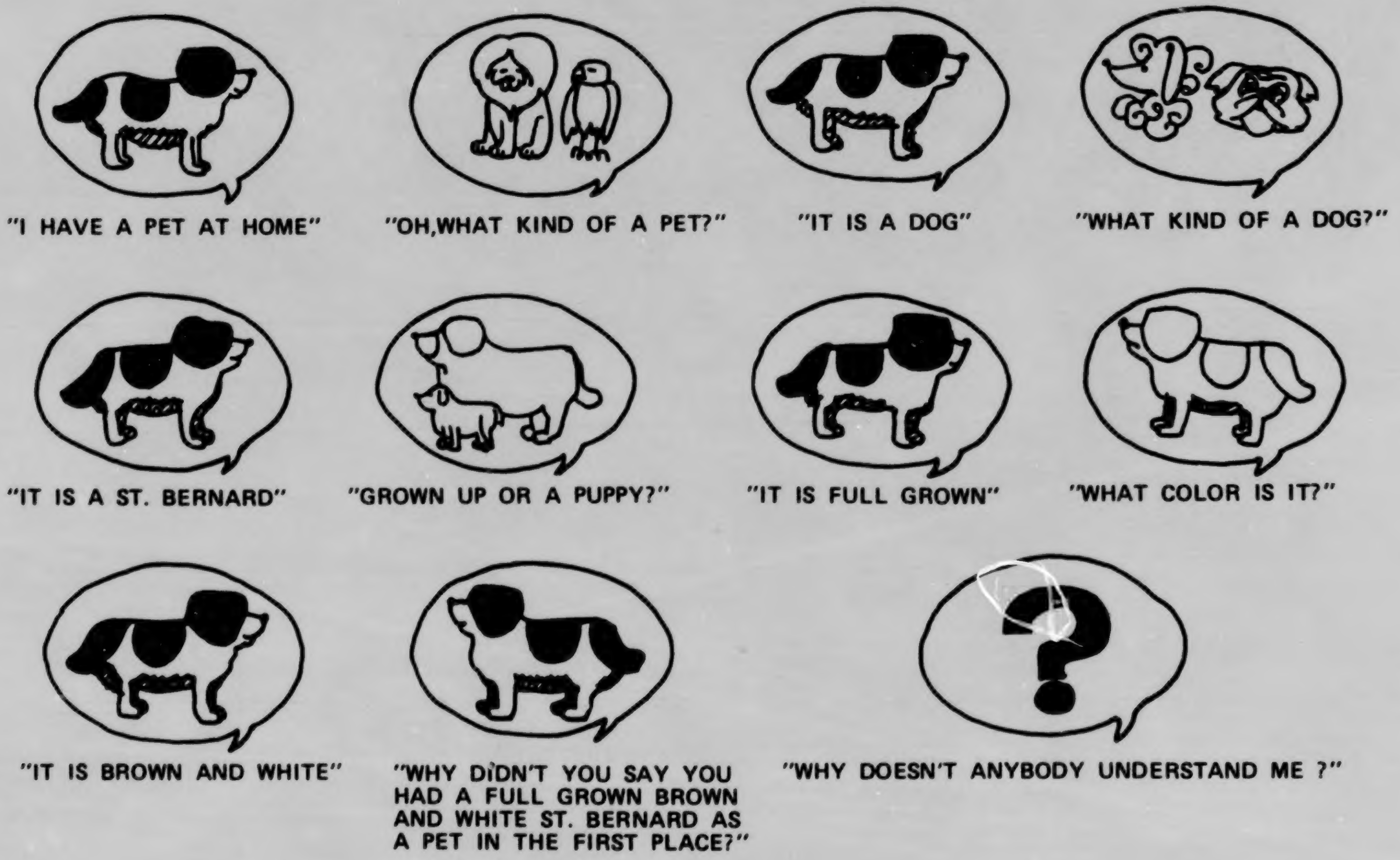
Certified Dental Assistant

Courtesy of American Dental Assistants Association.


CERTIFIED DENTAL TECHNICIAN
CDT

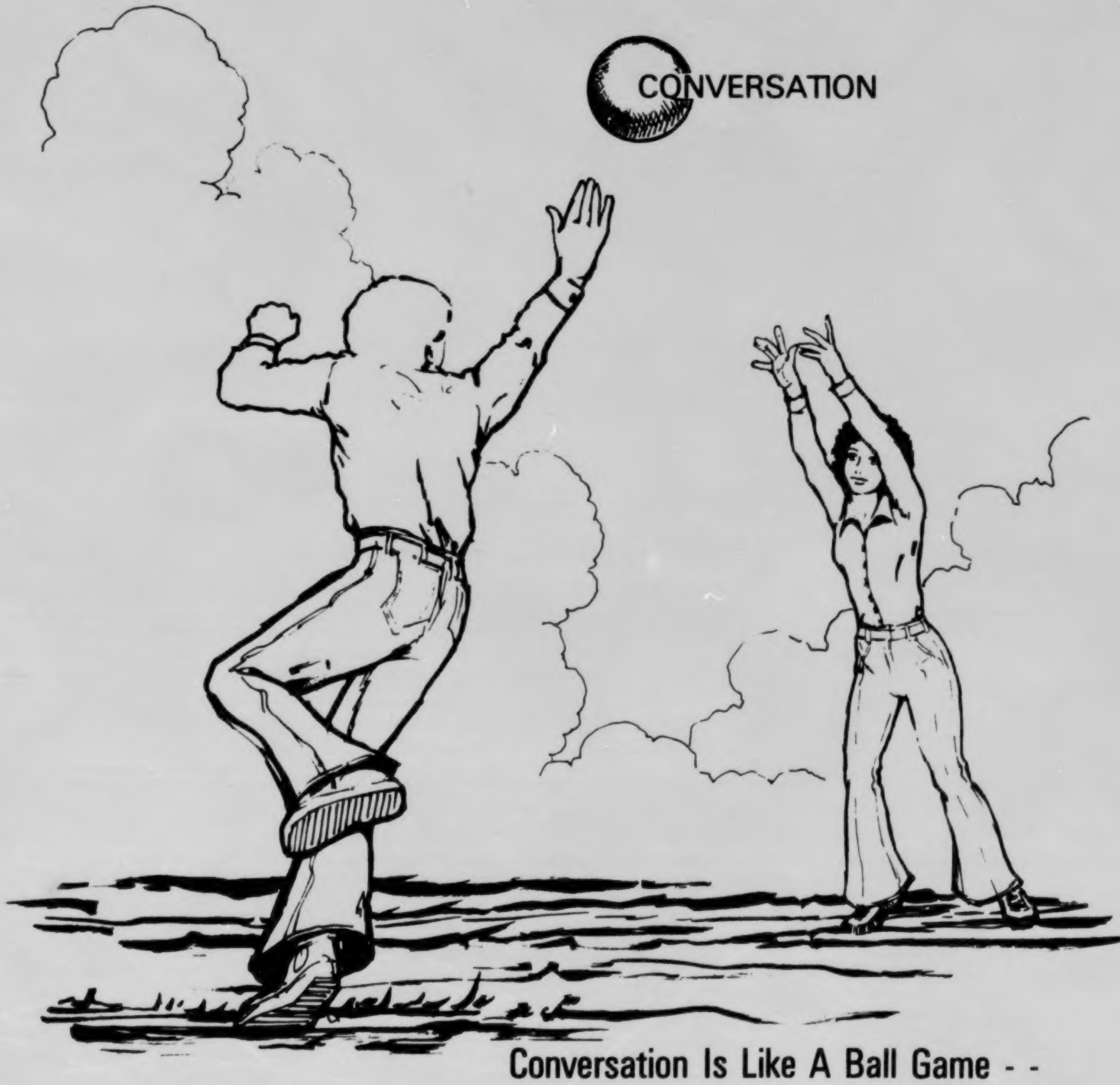
Certified Dental Technician

Communicating


"I HAVE A PET AT HOME"
"OH,WHAT KIND OF A PET?"
"IT IS A DOG"
"WHAT KIND OF A DOG?"
"IT IS A ST. BERNARD"
"GROWN UP OR A PUPPY?"
"IT IS FULL GROWN"
"WHAT COLOR IS IT?"
"IT IS BROWN AND WHITE"
"WHY DIDN'T YOU SAY YOU HAD A FULL GROWN BROWN AND WHITE ST. BERNARD AS A PET IN THE FIRST PLACE?"
"WHY DOESN'T ANYBODY UNDERSTAND ME ?"

DO NOT ASSUME EVERYONE UNDERSTANDS COMMON WORDS

Two-Way Conversation


CONVERSATION

Conversation Is Like A Ball Game - -
It Must Be Tossed Back And Forth

ORIENTATION AND COMMUNICATION
UNIT I

ASSIGNMENT SHEET #1--RECOGNIZE OBSTACLES TO COMMUNICATION

NAME______________________________ SCORE__________________________

PART A

Divide into small groups of five or six people. All but the first person in the group should move out of hearing distance. The first person is allowed two minutes to look at the picture included in this assignment. After the two minute time limit the first person should describe the scene to the second person without looking at the picture again. The second person should pass on a description to the third person and so on. The last person in the small groups should then describe the scene to the rest of the class. Use the checklist provided to check the results of each person's description and then answer the following questions.

1. Was there a breakdown in communication? Why?

____

____

2. Was listening an obstacle to communication? Why?

____

____

3. Were semantics an obstacle to communication? Why?

____

____

4. Was distortion an obstacle to communication? Why?

____

____

5. What can you learn about giving orders and instructions from this assignment?

____

____

ASSIGNMENT SHEET #1

6. What can you learn about rumors from this assignment?

____

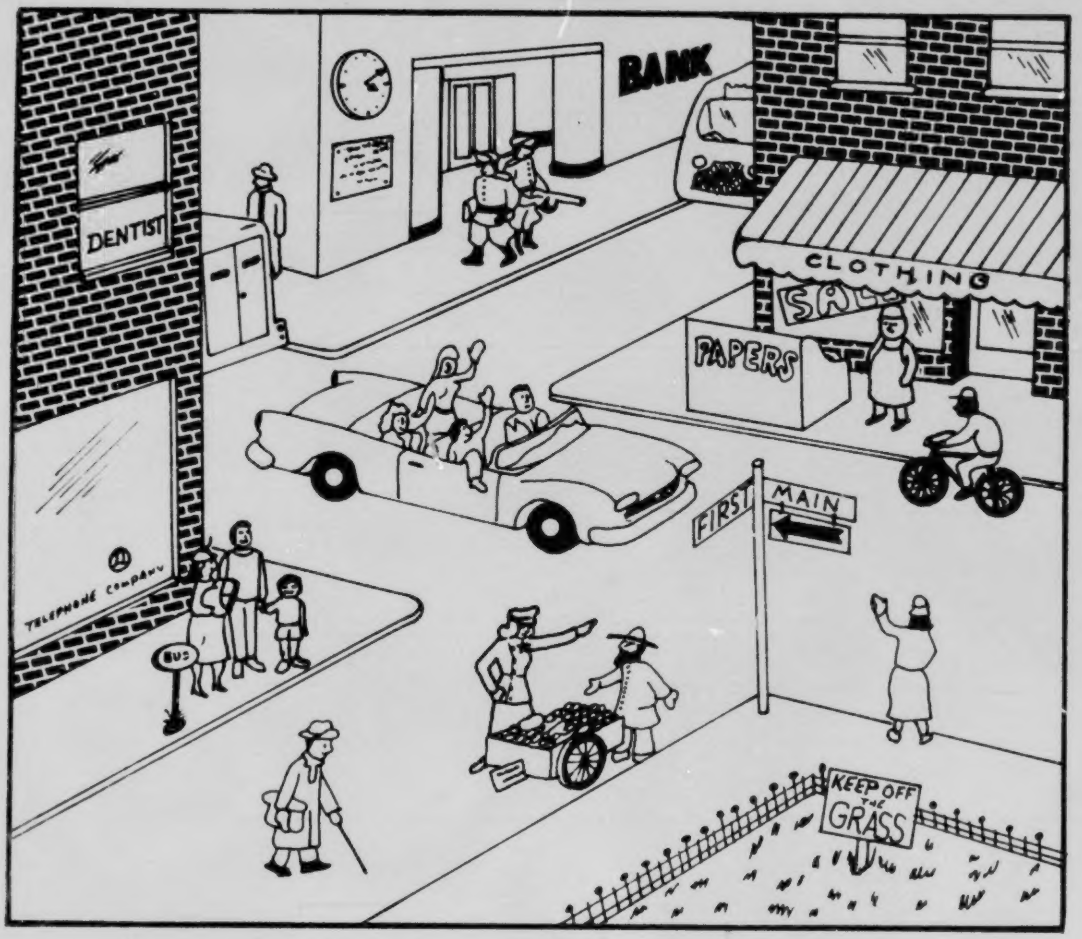
____

7. Were gestures helpful in conveying the true picture? Why?

____

____

ASSIGNMENT SHEET #1


BANK
DENTIST
CLOTHING
SALE
PAPERS
MAIN
FIRST
TELEPHONE COMPANY
BUS
KEEP OFF THE GRASS

ASSIGNMENT SHEET #1

Scene Checklist

______ 1. Intersection of First and Main

______ 2. First Street is not a straight street; there is a crook in the intersection

______ 3. First Street is more vertical and Main Street is more horizontal in the picture

______ 4. Main Street is a one-way street running from right to left in the picture

______ 5. There is a convertible in the middle of the intersection

______ 6. The convertible is headed down Main Street in the wrong direction

______ 7. A man is driving the car

______ 8. A man on the passenger side of the front seat has one leg hanging over the door and is waving to a woman

______ 9. There are two women in the back seat

______10. The woman on the driver's side of the back seat is waving to the same woman as the man

______11. The woman to whom the car passengers are waving is standing on the corner of the intersection shown in the bottom right-hand side of the picture

______12. The woman is standing next to the street corner sign

______13. The sign shows the street names and has an arrow showing the direction of the traffic flow on Main Street

______14. There is a small sign behind the woman standing on the corner near the street corner sign that reads Keep Off the Grass

______15. There is a small fence around the portion of the grassy area shown in the lower right-hand corner of the picture

______16. Standing on First Street near the street corner sign is a police officer

______17. The police officer has her back to the convertible

______18. The police officer is pointing to the street sign

______19. The police officer is talking to a man with a vegetable cart

ASSIGNMENT SHEET #1

_____20. There is an elderly man with a satchel, coat, hat, and cane walking across First Street to the left of the police officer and man with the vegetable cart headed toward the grassy area

_____21. Across the street from the grassy area on the left side of the picture is a two-story building with Telephone Company written on the ground-level plate glass window

_____22. On the second story of the telephone company is a window with Dentist written on it

_____23. A woman, a man, and a little boy are waiting at a bus stop in front of the telephone company (brick) on the sidewalk facing First Street

_____24. The woman is carrying a package

_____25. The man has the little boy by the hand

_____26. Across from the grassy area on the upper right side of the picture there is a brick clothing store facing Main Street with a striped awning across the front of the store

_____27. There is a large newspaper stand in front of the clothing store

_____28. A man dressed in an apron is standing on the right side of the newspaper stand facing Main Street

_____29. A boy is riding a bicycle on Main Street in front of the clothing store headed in the correct direction (right to left in the picture)

_____30. On the street corner to the left of the clothing store there is a bank facing First Street

_____31. A clock on the bank shows that it is 4:10

_____32. Two bank guards are coming out of the bank

_____33. One man is carrying a package

_____34. One man is carrying a machine gun

_____35. There is another man standing around the corner of the bank on Main Street near an armored car or van

_____36. The bus can be seen coming down First Street between the bank and the clothing store near the top of the page

ASSIGNMENT SHEET #1

PART B

Look at the picture again and answer the following questions. Then read the accompanying story to check your answers.

1. Is there a family traveling in a car?

2. Are there guards protecting an armored car?

3. Is the owner of the newspaper stand looking at what is happening in the scene?

4. Is the police officer giving directions?

One day a group of teenagers headed down Main Street the wrong way. The local butcher who was walking down the sidewalk, stopped by the newspaper stand to watch the scene. Fortunately for the teenagers, the police officer did not see them because she was busy scolding a vegetable seller for not having a license. But, alas, the whole community was hurt by the distraction. The bank robbers, dressed as armored guards, robbed the bank and got away without attracting any attention in all the confusion that resulted from their careless driving.

Do we often assume too much? What did you assume?

ORIENTATION AND COMMUNICATION
UNIT I

ASSIGNMENT SHEET #2--GIVE ORDERS, DIRECTIONS, AND INSTRUCTIONS

NAME_______________________________ SCORE___________________________

1. Choose one person in the class to describe the design on the following page (Figure 1). The rest of the class should try to draw the object exactly like the original design. The participants are not allowed to see the design.

2. Repeat the activity using the second design (Figure 2), but this time allow the participants to ask questions.

3. Think of a situation on your job where you may need to give directions, orders, and/or instructions. Organize your thoughts below and then give the instructions or directions to the class. Let your classmates rate and discuss the effectiveness of your directions or instructions using the following questions.

    a. Were the directions or instructions clear? Why or why not?

    ____

    ____

    b. Were they in an order that could be followed easily if you knew nothing about the product, service, or procedure beforehand?

    ____

    ____

    c. Were there any unnecessary points made? If so, how could they be eliminated?

    ____

    ____

    d. What were the clues that the right directions or instructions were followed?

    ____

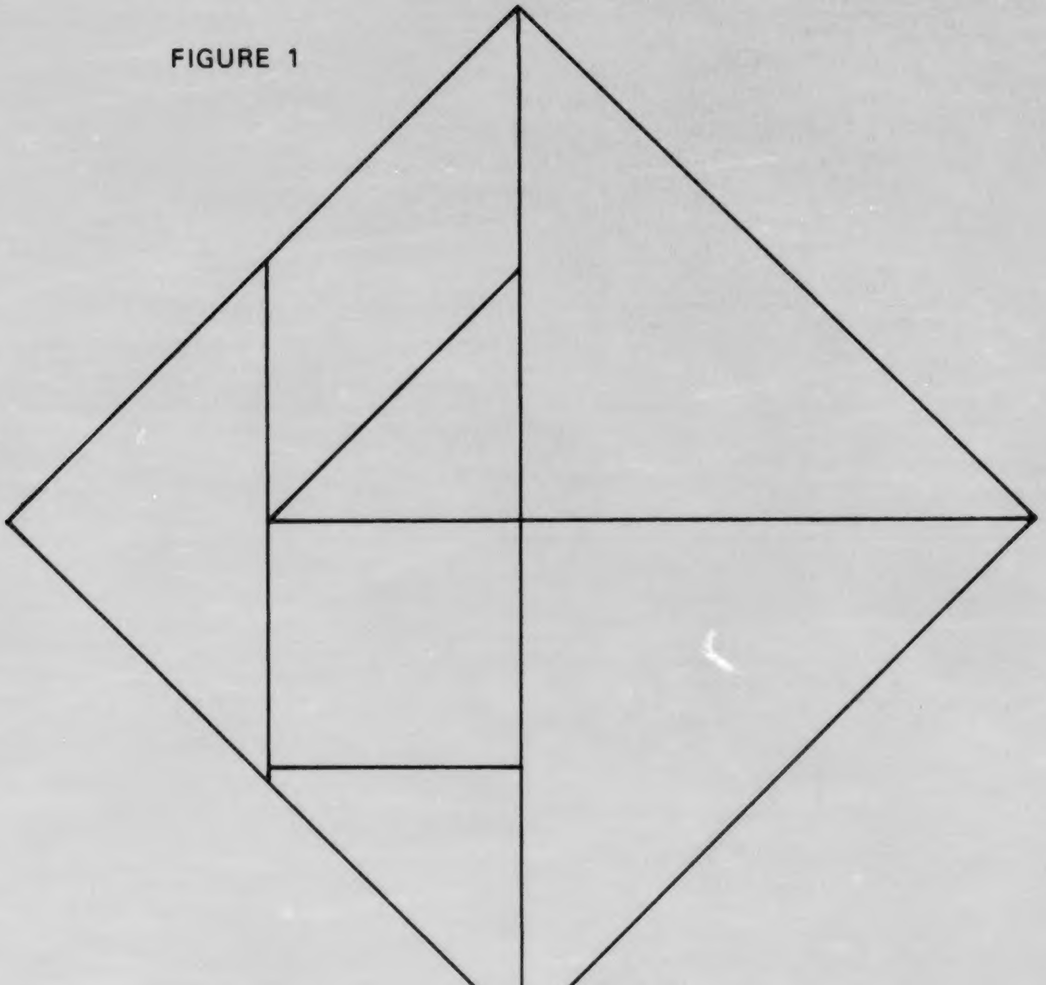
    ____

    ____

    ____

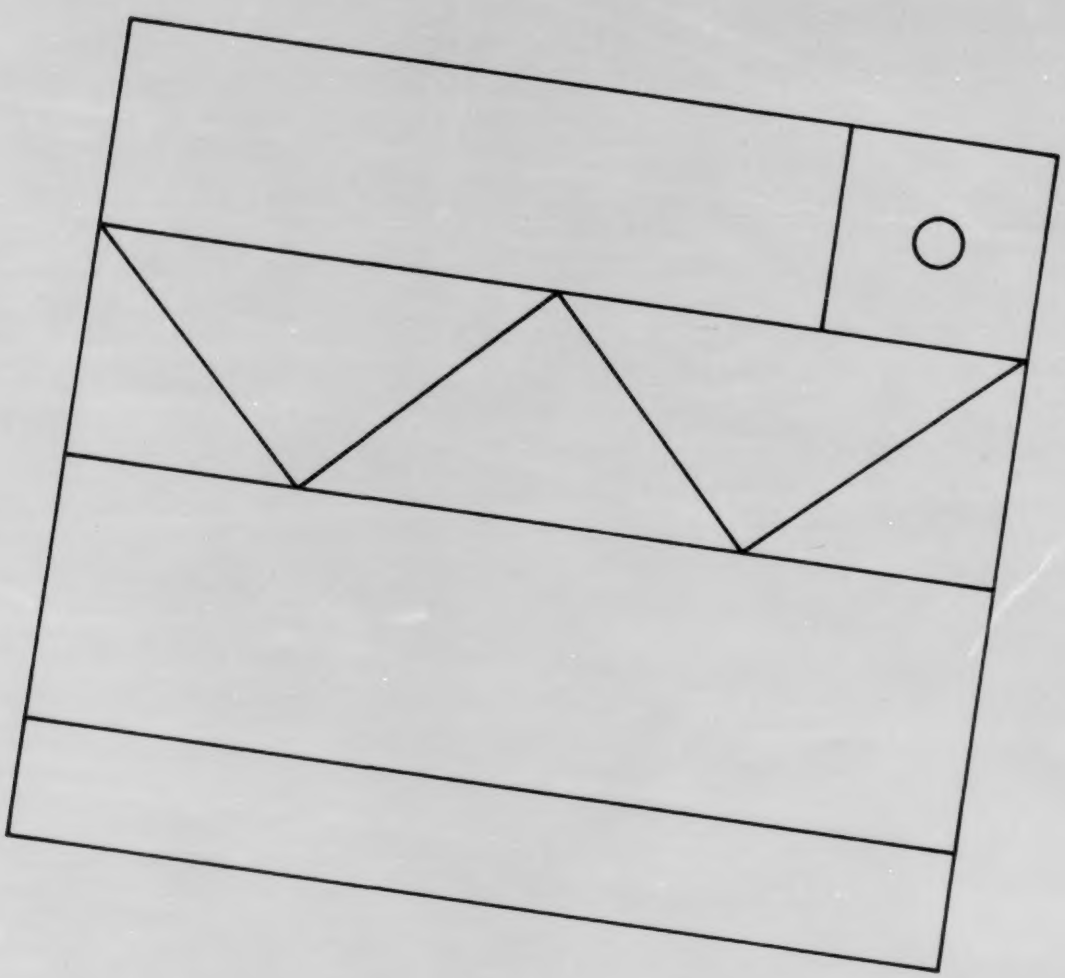
ASSIGNMENT SHEET #2

FIGURE 1



ASSIGNMENT SHEET #2

FIGURE 2



ORIENTATION AND COMMUNICATION
UNIT I

ASSIGNMENT SHEET #3--ANALYZE VOICE QUALITIES

NAME_______________________________ SCORE___________________________

A dental assistant's voice can calm or unnerve a patient. How would your voice affect a patient?

Make a tape recording of your voice. Then listen to the tape and complete the rating below. Using the rating of your voice on tape, prepare a list of ways in which you can improve your voice. Complete the list on a separate piece of paper.

Have your classmates rate your voice, too. Check back periodically to see if there has been any noticeable progress.

VOICE RATING

When the answer to any of the following questions is "yes," put down a minus four. If it is "maybe" or "sometimes," put down a minus two. If it is "no," put down zero. Of course, the lower the numerical score the fewer voice faults you have. A score of 0 to -10 is excellent; -10 to -20 is good; -20 to -30 is fair; and -30 and below is unsatisfactory.

	Answer			Score
	Yes	Maybe/Sometimes	No	
1. Do you speak too loudly or in a noisy manner?				
2. Do people frequently ask you to repeat a statement you have made?				
3. Do you speak in the same tone continually?				
4. Do you speak with the same volume continually?				
5. Do you speak in an artificial, unnatural, and affected voice?				
6. Is your voice high-pitched and shrill?				
7. Do you frequently speak with lungs almost empty?				

ASSIGNMENT SHEET #3

	Answer			Score
	Yes	Maybe/Sometimes	No	
8. Do you speak in long sentences which frequently lose their meaning?				
9. Do you hiss when using certain letters (P, B, T, C, S)?				
10. Do you speak in mush tones as though you had something in your mouth?				
11. Do you use "uh" and "er-uh" frequently?				
12. Is your voice clouded and husky?				
13. Do you talk "through your nose"?				
14. Do you talk in a jerky manner?				
15. Do you talk in a whining and apologetic manner?				
16. Do you talk in a dominating, dictatorial tone?				
17. Do you stammer and stutter?				
18. Do you often speak too fast or in a slow drawl?				
19. Do you mispronounce words frequently?				
20. Does your voice lose its force and expression at the end of sentences?				
21. Do you speak in a flat, dull, and colorless tone?				
22. Do you jumble up consonants, making your speech hard to understand?				

ASSIGNMENT SHEET #3

	Answer			Score
	Yes	Maybe/Sometimes	No	
23. Do you use a "gushy" or " gooey" voice when talking to friends?				
24. Do you choke off vowel sounds?				
25. Is your voice unpleasant when you laugh?				
26 Do you put the "d," "t," and "ing" on the end of words?				
27. Do you run words together?				
28. Do you have a whining voice?				
29. Do you use colloquialisms or speak with an accent?				
30. Do you have an adequate vocabulary?				
31. Do your words flow out evenly and clearly?				
32. Is your voice friendly and cordial?				
33. Can you be heard clearly in the back of the room when speaking?				
34. Do you emphasize your main thought?				

ORIENTATION AND COMMUNICATION
UNIT I

ASSIGNMENT SHEET #4--INVESTIGATE EXPANDED FUNCTIONS OF DENTAL ASSISTANT

NAME____________________________________ SCORE________________

Consult a copy of the dental regulations for your state and determine which of the following "expanded functions" are permitted. Space has been provided for additional expanded functions as open provision permits.

_______ 1. Making radiographic exposures

_______ 2. Taking impressions for study casts

_______ 3. Removing sutures and dressings

_______ 4. Applying topical anesthetics

_______ 5. Performing preliminary oral examinations

_______ 6. Polishing coronal surfaces of teeth

_______ 7. Providing oral health instruction

_______ 8. Applying anticariogenic agents topically

_______ 9. Administering local anesthetics

_______10. Placing and removing rubber dams

_______11. Placing and removing matrices

_______12. Placing and removing temporary restorations

_______13. Placing, carving, and finishing amalgam restorations

_______14. Placing and finishing resin, composite, and silicate restorations

_______15. Removing excess cement from coronal surfaces of teeth

_______16.

_______17.

_______18.

_______19.

_______20.

Expanded functions in my state are assigned by____________________________.
list/open provision

(NOTE: "List" refers to specific tasks itemized for the dental health team and "open provision" authorizes the dentist to delegate any task not prohibited.)

ORIENTATION AND COMMUNICATION
UNIT I

ASSIGNMENT SHEET #5--INTERVIEW DENTAL HEALTH TEAM

NAME______________________________ SCORE__________________________

This activity will provide an opportunity for you to find out "first hand" how a dentist, dental hygienist, and dental assistant see and/or feel about their jobs. Arrange to interview each of these people in your community. This interview can help you to get to know what it may really be like to work in a dental office. Share your findings in a class discusssion.

1. How long have you been working in the dental health field?

____

____

2. Do you enjoy this profession? Why?

____

____

3. Does your profession sometimes irritate or upset you? Why?

____

____

4. What type of people do you work with best?

____

____

5. What are your hobbies?

____

____

6. What is the most rewarding part of your job?

____

____

ASSIGNMENT SHEET #5

7. If you could start over, would you select the same kind of profession? What would you do differently?

____

____

8. How would you feel about your child choosing the dental health field as a career?

____

____

ORIENTATION AND COMMUNICATION
UNIT I

TEST

NAME ______________________________ SCORE ____________

1. Match the terms on the right to the correct definitions by placing the correct numbers in the blanks provided.

_____a. Training program designed to teach the dentist and the auxiliary to work together with maximum efficiency

_____b. Variety of general practitioners and specialists working together in a shared facility

_____c. Person responsible for preventive dentistry programs

_____d. Dental assistant who has received extra training and may assume additional responsibilities as permitted by state law

_____e. Serves as assistant wherever needed in the office

_____f. Responsible for maintaining an efficient dental business office

_____g. Employed by group practice for all nonprofessional administrative responsibilities

_____h. Process of mechanically cleaning debris from surface of teeth to prevent dental disease

_____i. Area surrounding the root apex of a tooth

_____j. Anchoring ligament and tissue that holds teeth in place

_____k. Incorrect position of the teeth resulting in faulty meeting of teeth or jaws

1. Control assistant
2. Prophylaxis
3. Periapical
4. Dental auxiliary utilization program (D.A.U.)
5. Coordinating assistant
6. Periodontal ligament
7. Business manager or administrator
8. Secretarial assistant
9. Malocclusion
10. Expanded function dental assistant
11. Group practice

______l. Act of removing teeth

______m. Receiving of incoming signals

______n. Interpretation of message received

______o. Ability to understand feelings of others

______p. Basic ability to communicate

______q. Requires the use of all the special senses

12. Empathy
13. Intelligence
14. Extraction
15. Listening
16. Evaluation
17. Perception

2. List four purposes of dentistry.

a. ____

b. ____

c. ____

d. ____

3. Write the meanings of the dental degrees and associations in the spaces provided below.

a. A.D.A. __________________________________

b. B.S. ____________________________________

c. M.S. ____________________________________

d. D.M.D. __________________________________

e. D.D.S. __________________________________

f. C.D.T. __________________________________

g. A.D.A.A. ________________________________

4. Distinguish between the duties of the dental assistant (A), dental hygienist (H), and the dental laboratory technician (T) by placing the correct letter in the blanks provided. A blank may have more than one correct answer.

______a. Performs prophylaxis

______b. Assists in secretarial procedures

______c. Provides diagnostic aid for dentist

______d. Performs mechanical and technical tasks of prosthesis according to dentist's prescription

______e. Assists in chairside procedures _____f. Provides instruction in dental health education

_____g. Prepares patients for examination, treatment, or surgery

_____h. Assists dentist in operative procedures

5. Describe the educational requirements of dental health team.

a. Dentist ____

____

____

b. Certified dental assistant ______________________________

____

____

c. Dental hygienist ______________________________________

____

____

d. Dental laboratory technician ____________________________

____

____

6. Match the specialized fields of dentistry on the right to the correct descriptions. Write the correct numbers in the blanks provided.

_____a. Deals with dental health problems through education, prevention, and correction on a community, state, or national level

_____b. Deals with diagnosis and treatment of diseases of pulp and periapical tissue

_____c. Deals with causes, prevention, treatment, and corrections of the irregularities or malocclusion of the teeth and arches

_____d. Deals with treatment of conditions causing or resulting from morbid anatomic or functional changes in the structure of the mouth

1. Endodontics
2. Dental public health
3. Orthodontics
4. Oral pathology

_____e. Deals with the extraction of teeth, including diagnosis and surgical intervention in diseases, defects, and injuries of the human teeth and jaws, and any surgical facial structures

_____f. Deals with the oral treatment of children

_____g. Deals with the diagnosis, prevention, and treatment of diseases of the teeth and supporting tissues

_____h. Deals with the replacement of lost or absent natural teeth and artificial substitutes

5. Prosthodontics
6. Pedodontics
7. Oral surgery
8. Periodontics

7. List five sources of job opportunities for the dental assistant.

a. ____

b. ____

c. ____

d. ____

e. ____

8. List eight characteristics of a good dental assistant.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

h. ____

9. Select from the list below the responsibilities of a dental assistant. Mark each correct answer with an "X."

______a. Leave personal problems at home

______b. Use diplomacy in dealing with people

______c. Don't be concerned about patients' comfort

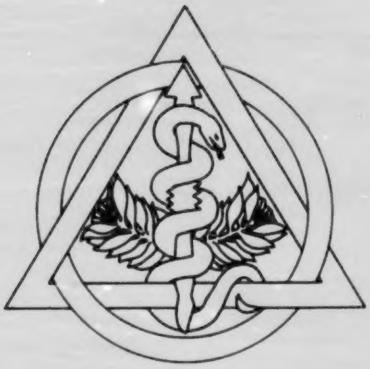
______d. Relieve dentist of unnecessary responsibilities

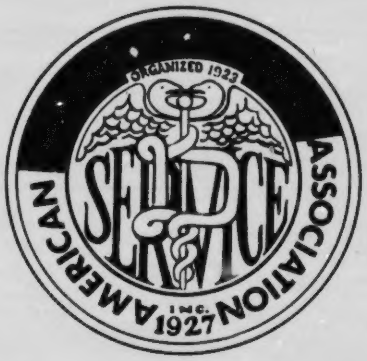
______e. Interrupt patient if questions are asked

______f. Be aware of ways to improve auxiliary personnel

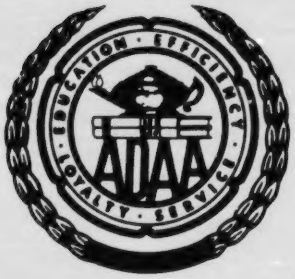
______g. Be efficient

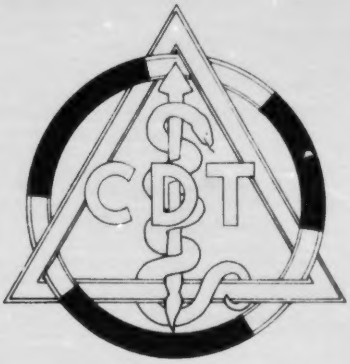
10. Label seals of the dental health team by writing the correct names in the blanks provided.




ORGANIZED 1923
SERVICE
AMERICAN
ASSOCIATION
INC.
1927

a. ______________________________ b. ______________________________


EDUCATION · EFFICIENCY
LOYALTY · SERVICE
ADAA



c. ______________________________ b. ______________________________

11. List types of communication.

a. ____

b. ____

c. ____

12. Select from the following list factors necessary for effective communication with auxiliary personnel and patients. Mark each correct answer with an "X."

______a. Avoid slang

______b. Pronounce words distinctly

______c. Use bad English

______d. Avoid cooperation

______e. Avoid meaningless, trite phrases

______f. Be sure terms are interpreted the same way by both the assistant and the patient

13. Select from the following list ways to carry on a casual conversation. Mark each correct answer with an "X."

______a. Use complimentary phrases often

______b. Learn the art of listening

______c. Monopolize the conversation

______d. Use the person's name often

______e. Tell about your interests

______f. Avoid using hands too much talking

14. Distinguish between positive and negative gestures and expressions by placing a "P" for positive or "N" for negative in the correct blanks.

______a. Shoulders upright

______b. Feet flat on floor while sitting

______c. Hand on side of waist or lips pressed tightly

______d. Moving around in chair

______e. Shrugged shoulders

______f. Smiling

_____g. Shuffling papers

_____h. Protruding lower lip

_____i. Arms swinging freely

_____j. Eye contact

_____k. Raised eyebrows

15. Recognize obstacles to communication.

16. Give orders, directions, and instructions.

17. Analyze voice qualities.

18. Investigate expanded functions of dental assistant.

19. Interview dental health team.

(NOTE: If activities 15-19 have not been done prior to the test, ask your instructor when they should be completed.)

ORIENTATION AND COMMUNICATION
UNIT I

ANSWERS TO TEST

1. a. 4
   b. 11
   c. 1
   d. 10
   e. 5
   f. 8
   g. 7
   h. 2
   i. 3
   j. 6
   k. 9
   l. 14
   m. 17
   n. 16
   o. 12
   p. 13
   q. 15

2. Any four of the following:
   a. Maintain good oral health
   b. Aid in ability to masticate (chew) food
   c. Maintain and improve personal appearance
   d. Correct malfunctions
   e. Prevent oral disease and pain
   f. Diagnose diseases of body systems

3. a. American Dental Association
   b. Bachelor of Science
   c. Master of Science
   d. Doctor of Medical Dentistry
   e. Doctor of Dental Surgery
   f. Certified Dental Technician
   g. American Dental Assistants Association

4. a. H
   b. A
   c. H
   d. T
   e. A
   f. H, A
   g. A
   h. A

5. Description should include:

a. Dentist

1) Attends minimum of two years of liberal arts college

2) Attends A.D.A. approved college

3) Passes written and practical examinations

b. Certified dental assistant

1) Completes one or two years of A.D.A. approved school

2) Passes written and practical examinations

3) Is employed as a dental assistant for one or two years

4) Holds A.D.A. active membership

c. Dental hygienist

1) Attends two years accredited college in dental hygiene

2) Passes written and practical examinations

d. Dental laboratory technician

1) Completes two or four years of C.D.T. approved school

2) Passes written and practical examinations

3) Is employed five years before taking C.D.T. exam

6. a. 2 e. 7

b. 1 f. 6

c. 3 g. 8

d. 4 h. 5

7. Any five of the following:

a. Private practice

b. Group practice

c. Specialty practice

d. Hospital dentistry

e. Public health dentistry

f. Armed forces

   g. Dental schools
   h. Volunteer service
   i. Dental assistant educator

8. Any eight of the following:
   a. Cooperative
   b. Shows initiative
   c. Honest
   d. Willing to learn
   e. Follows directions
   f. Neat appearance and good grooming
   g. Smiles
   h. Doesn't talk too much
   i. Polite
   j. Patient
   k. Able to leave personal problems at home
   l. Good attendance
   m. Dependable
   n. Enthusiastic
   o. Accepts criticism well
   p. Loyal
   q. Sense of humor
   r. Positive attitude
   s. Lack of jealousy
   t. Tactful

9. a, b, d, g

10. a. Dentistry
    b. Dental hygienist
    c. Certified dental assistant
    d. Certified dental technician

11. a. Gestures and expressions
    b. Written
    c. Verbal

12. a, b, e, f

13. a, b, d, f

14. a. P
    b. P
    c. N
    d. N
    e. N
    f. P
    g. N
    h. N
    i. P
    j. P
    k. N

15. Evaluated to satisfaction of instructor

16. Evaluated to satisfaction of instructor

17. Evaluated to satisfaction of instructor

18. Evaluated to satisfaction of instructor

19. Evaluated to satisfaction of instructor

STATE PRACTICE ACT AND ETHICAL PROCEDURES
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to exhibit appropriate ethical conduct in the dental office. The student should also be able to complete the dental assistant creed, recite the dental assistant pledge, and interpret areas covered by the American Dental Association Principles of Ethics. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with State Practice Act and ethical procedures to the correct definitions.
2. Distinguish between the responsibilities of the State Board of Dental Examiners and State Board of Licensure.
3. State the purposes of the American Dental Assistants Association.
4. Match the sections of the American Dental Assistants Association Principles of Ethics to the areas covered.
5. Select from a list principles of ethics and obligations provided by the American Dental Assistants Association.
6. Recite the Dental Assistants' Pledge of the American Dental Association.
7. Complete the form for the Creed for Dental Assistants.
8. Use acceptable ethical practices to react to dental office situations.
9. Interpret ethical areas covered by the American Dental Association Principles of Ethics.

STATE PRACTICE ACT AND ETHICAL PROCEDURES
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

- A. Provide student with objective sheet.
- B. Provide student with information and assignment sheets.
- C. Discuss unit and specific objectives.
- D. Discuss information and assignment sheets.
- E. Lead a discussion on prevention of malpractice suits.
- F. Cite examples and personal experiences to arouse curiosity.
- G. Order copies of laws governing the practice of dentistry in your state each year.

  (NOTE: Oklahoma teachers order from Oklahoma State Dental Association, 629 North West Expressway, Oklahoma City, Oklahoma 73118.)
- H. Lead a discussion on councils of the American Dental Association.
- I. Assist with Assignment Sheets #1 through #3.
- J. Give test.

II. Instructional materials:

- A. Objective sheet
- B. Information sheet
- C. Assignment sheets
  1. Assignment Sheet #1--Complete the Form for the Creed for Dental Assistants
  2. Assignment Sheet #2--Use Acceptable Ethical Practices to React to Dental Office Situations
  3. Assignment Sheet #3--Interpret Ethical Areas Covered by the American Dental Association Principles of Ethics
- D. Test
- E. Answers to test

III. Unit references:

A. *Dental Assisting: Course I. Orientation in the Dental Profession and Office.* Chapel Hill: University of North Carolina School of Dentistry and Extension Division, 1980.

B. Ehrlich, Ann. *Ethics and Jurisprudence.* Champaign, Illinois: The Colwell Company, 1976.

C. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W. B. Saunders Co., 1976.

STATE PRACTICE ACT AND ETHICAL PROCEDURES
UNIT II

INFORMATION SHEET

I. Terms and definitions

   A. American Dental Association (A.D.A.)--Encourages improvement and protection of health of public and promotes the art and science of dentistry

      Examples: Legislation, education, research, and publications

   B. Ethics--Science dealing with professional conduct and judgment

      (NOTE: The reason for discussing ethics in this unit is to alert you to the fact that the dentist's professional conduct and yours are governed by voluntary ethical standards established by your organization.)

   C. Jurisprudence--System of laws applied to and affecting the dental profession from a legal standpoint

   D. Licensure--Granting of licenses to practice professionally and legally

   E. Malpractice--Any professional misconduct or unreasonable lack of skill or fidelity in performance of professional duties

      (NOTE: To help avoid malpractice claims, keep records accurate and up-to-date. Observe the regulations set forth in your office.)

   F. Respondeat Superior ("Let the Master Answer")--An employer is held responsible for the wrongdoings of employees, provided wrongdoing was committed within the scope of their employment

   G. Contributory negligence--Failure on the part of the patient to follow the dentist's instructions both during and after treatment

   H. State Board of Dental Examiners--Agency of a state which administers and enforces the Dental Practice Act of that state

   I. State Dental Practice Act--State law which controls the practice of dentistry

   J. State Board of Licensure--State agency that protects public from unqualified or incompetent practitioners

II. Responsibilities of State Board of Dental Examiners and State Board of Licensure

   A. State Board of Dental Examiners

      1. Writes licensure examinations

      2. Sets standards for licensure

INFORMATION SHEET

3. Approves necessary bylaws

4. Provides for the expansion of duties and responsibilities of dental assistants and dental hygienists

    (NOTE: The dentist remains legally responsible for services performed for patients by auxiliary personnel.)

B. State Board of Licensure

(NOTE: Dentists and dental hygienists must be licensed by the state in which they practice. In most states dental assistants must also meet licensure requirements.)

1. Evaluates records of applicants for educational and moral requirements

2. Administers theoretical and practical examinations to applicants

III. Purposes of the American Dental Assistants Association

A. Promotes education of dental assistant

B. Improves and sustains vocation of dental assisting

C. Contributes to improvement of public health

D. Advances the dental profession

IV. Sections of American Dental Assistants Association Principles of Ethics

A. Section 1--Conduct of Members

B. Section 2--Obligations

C. Section 3--Use of Title "Certified Dental Assistant"

D. Section 4--Dental Assistant Pledge

V. Principles of ethics and obligations of American Dental Assistants Association

(NOTE: Everyone entering a profession is expected to adhere to a code of ethics. The standards are usually higher than those required by law.)

A. Honesty in all things

B. Obedience to the State Practice Act

(NOTE: This pertains to the State Practice Act of the state in which you are employed.)

INFORMATION SHEET

C. Adherence to ethics requirements of employer

D. Obligations to members in the association

E. Confidentiality

Examples: Details of professional service rendered, details the patient has confided in you

(NOTE: Remember this: What you see here, what you hear here, stays here.)

VI. The Dental Assistants' Pledge of the American Dental Association

"I solemnly pledge that, in the practice of my profession, I will always be *loyal* to the welfare of the patients who come under my care, and the interest of the *practitioner* whom I serve. */* will be just and generous to the *members of* my profession, aiding them and lending them *encouragement*, devote my best energies to the service of humanity in that relationship of like to which I consecrated myself when I elected to become a Dental Assistant."

by Dr. C. M. Johnson

STATE PRACTICE ACT AND ETHICAL PROCEDURES
UNIT II

ASSIGNMENT SHEET #1--COMPLETE THE FORM FOR THE CREED FOR DENTAL ASSISTANTS

NAME ________________________________ SCORE ______________

The student shall read the creed and complete by filling in the blanks. Return the form to instructor no later than __________________

STUDENT CREED FORM

____________________, who is enrolled in ____________________ will, after proper instruction, assume responsibility of knowing and subscribing to the following creed:

CREED FOR DENTAL ASSISTANTS

To be loyal to my employer, my calling and myself.

To develop initiative--having the courage to assume responsibility and the imagination to create ideas and develop them.

To be prepared to visualize, take advantage of and fulfill the opportunities of my calling.

To be a co-worker--creating a spirit of co-operation and friendliness rather than one of fault-finding and criticism.

To be enthusiastic--for therein lies the easiest way to accomplishment.

To be generous, not alone of my name but of my praise and my time.

To be tolerant with my associates, for at times I too make mistakes.

To be friendly, realizing that friendship bestows and receives happiness.

To be respectful of other person's viewpoint and condition.

To be systematic, believing that system makes for efficiency.

To know that value of time for both my employer and myself.

To safeguard my health, for good health is necessary for the achievement of a successful career.

To be tactful--always doing the right thing at the right time.

To be courteous--for this is the badge of good breeding.

To walk on the sunny side of the street, seeing the beautiful things in life rather than fearing the shadows.

To keep smiling always.

Juliette A. Southard

I hereby promise to follow and subscribe to the elements required by the "Creed for Dental Assistants."

Date ______________ Student's signature ______________________________

STATE PRACTICE ACT AND ETHICAL PROCEDURES
UNIT II

ASSIGNMENT SHEET #2--USE ACCEPTABLE ETHICAL PRACTICES TO REACT TO DENTAL OFFICE SITUATIONS

NAME ______________________________ SCORE ______________

Since dentists cannot advertise, they must depend on the dental assistant to advertise for them since the assistant is usually the first contact a patient has with the office. The dental assistant can help to create a favorable first impression by displaying a pleasant manner and professional conduct. Many patients have expressed anger upon overhearing private business being discussed by dental assistants, medical assistants, or nurses. The patient must feel confident that any matter discussed with a doctor will be kept confidential. Be prepared to react to the following situations in class.

1. Did you know that Mrs. Wilson's husband is seeing another woman. And Mrs. Wilson has cancer. Isn't it terrible?

   ____
   ____
   ____
   ____

2. Did you see Lana Ford? She's pregnant, I just bet, and her mother isn't even smart enough to realize it.

   ____
   ____
   ____
   ____

3. I didn't know what to do the other day, but I was glad that I was familiar with the correct ethics and refused Dr. Jones when he asked me to file and carve Mr. Harpester's restoration.

   ____
   ____
   ____
   ____

ASSIGNMENT SHEET #2

4. When we were ordering the paper products last week, I just told Dr. Lang that she was incorrect in her labeling, and she was glad I pointed it out to her.

____

____

____

____

5. Some problems are going to arise if the doctor asks me to fill out the insurance papers and state that he has finished the necessary work when he really hasn't.

____

____

____

____

6. When Mrs. Brown and her four kids come in today, I intend to tell her that if her children don't behave while she's in operatory she'll have to bring someone with her next time.

____

____

____

____

7. Is it right for Dr. Land to get a rebate of payment when our doctor did the work in her absence?

____

____

____

____

8. I know we're not supposed to repeat anything we hear in the office, but did you know that Jack Kinder put on his questionnaire that he had VD?

____

____

____

____

STATE PRACTICE ACT AND ETHICAL PROCEDURES
UNIT II

ASSIGNMENT SHEET #3--INTERPRET ETHICAL AREAS COVERED BY THE AMERICAN DENTAL ASSOCIATION PRINCIPLES OF ETHICS

NAME ______________________ SCORE ____________

The practice of dentistry must maintain and enrich the professional status of everyone who practices dentistry. The code of ethics must be willingly accepted and fulfilled. It is your duty as a dental assistant to understand these ethics and assist your dentist in upholding them.

Use your textbook as a reference to write an example or note under each item.

Principles of Ethics Provided by the American Dental Association

1. Education Beyond the Usual Level

   ____

   ____

2. Service to the Public

   ____

   ____

3. Government of a Profession

   ____

   ____

4. Leadership

   ____

   ____

5. Emergency Service

   ____

   ____

6. Use of Auxiliary Personnel

   ____

   ____

ASSIGNMENT SHEET #3

7. Consultation

8. Unjust Criticism and Expert Testimony

9. Rebates and Split Fees

10. Secret Agents and Exclusive Methods

11. Patents and Copyrights

12. Advertising

13. Cards, Letterheads, and Announcements

14. Office Door Lettering and Signs

15. Use of Professional Titles and Degrees

ASSIGNMENT SHEET #3

16. Health Education of the Public

____

____

17. Contract Practice

____

____

18. Announcement of Limitation of Practice

____

____

19. Directories

____

____

20. Professional Corporations

____

____

21. Judicial Procedure

____

____

STATE PRACTICE ACT AND ETHICAL PROCEDURES
UNIT II

TEST

NAME ______________________________ SCORE ______________

1. Match the terms on the right to the correct definitions by writing the correct numbers in the blanks provided.

_____a. Science dealing with professional conduct and judgment

_____b. System of laws applied to and affecting the dental profession from a legal standpoint

_____c. Granting of licenses to practice professionally and legally

_____d. Any professional misconduct or unreasonable lack of skill or fidelity in performance of professional duties

_____e. An employer is held responsible for the wrongdoings of employees, provided wrongdoing was committed within the scope of their employment

_____f. Failure on the part of the patient to follow the dentist's instructions both during and after treatment

_____g. Agency of a state which administers and enforces the Dental Practice Act of that state

_____h. State law which controls the practice of dentistry

_____i. State agency that protects public from unqualified or incompetent practitioners

_____j. Encourages improvement and protection of health of public and promotes the art and science of dentistry

1. Contributory negligence
2. State Board of Licensure
3. Licensure
4. Respondeat Superior ("Let the Master Answer")
5. Ethics
6. State Board of Dental Examiners
7. Jurisprudence
8. Malpractice
9. State Dental Practice Act
10. American Dental Association (A.D.A.)

2. Distinguish between responsibilities of the State Board of Dental Examiners (DE) and the State Board of Licensure (L) by writing the correct letters in the blanks.

_____a. Approves necessary bylaws

_____b. Administers theoretical and practical examinations to applicants

_____c. Evaluates records of applicants for educational and moral requirements _____d. Sets standards for licensure

_____e. Writes licensure examinations

_____f. Provides for the expansion of duties and responsibilities of dental assistants and dental hygienists

3. State the purposes of the American Dental Assistants Association.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

4. Match the sections of the American Dental Assistants Association Principles of Ethics to the areas covered by placing the correct letter in the blanks provided.

_____a. Obligations 1. Section 1

_____b. Dental Assistant Pledge 2. Section 2

_____c. Conduct of Members 3. Section 3

_____d. Use of Title "Certified Dental Assistant" 4. Section 4

5. Select from the list below principles of ethics and obligations provided by the American Dental Assistants Association. Mark each correct answer with an "X."

_____a. Regulation of continued education for dental health teams

_____b. Adherence to ethics requirements of employer

_____c. Totally responsible for legal and ethical actions for auxiliary personnel

_____d. Regulation of advertising practices

_____e. Honesty in all things

_____f. Obedience to the State Practice Act

_____g. Confidentiality

_____h. Obligations to members in association

6. Recite the Dental Assistants' Pledge of the American Dental Association.

7. Complete the form for the Creed for Dental Assistants.
8. Use acceptable ethical practices to react to dental office situations.
9. Interpret ethical areas covered by the American Dental Association Principles of Ethics.

(NOTE: If activities 6-9 have not been completed prior to the test, ask your instructor when they should be completed.)

STATE PRACTICE ACT AND ETHICAL PROCEDURES
UNIT II

ANSWERS TO TEST

1. a. 5
   b. 7
   c. 3
   d. 8
   e. 4
   f. 1
   g. 6
   h. 9
   i. 2
   j. 10
2. a. DE
   b. L
   c. L
   d. DE
   e. DE
   f. DE
3. a. Promotes education of dental assistant
   b. Improves and sustains vocation of dental assisting
   c. Contributes to improvement of public health
   d. Advances the dental profession
4. a. 2
   b. 4
   c. 1
   d. 3

5. b, e, f, g, h
6. Evaluated to satisfaction of instructor
7. Evaluated to satisfaction of instructor
8. Evaluated to satisfaction of instructor
9. Evaluated to satisfaction of instructor

PERSONAL HEALTH AND GROOMING
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to demonstrate appropriate health and grooming habits for the dental office. The student should also be able to wash hands using regular procedures and to clean teeth. This knowledge will be evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with personal health and grooming to the correct definitions.
2. List factors that influence health and appearance of dental assistant.
3. Select from a list essentials of body cleanliness for a dental assistant.
4. List elements of complexion care.
5. Select from a list essentials of well-groomed hair.
6. State guidelines for promoting good posture.
7. Select from a list characteristics of good health.
8. Describe characteristics of appropriate clothing selection.
9. Select from a list characteristics of an emotionally mature person.
10. Arrange in order steps to improve personality.
11. List ways to maintain a healthy mental attitude.
12. Record smile observations.
13. Evaluate personal health/grooming habits.
14. Demonstrate the ability to:
    a. Wash hands using regular procedure.
    b. Clean teeth.

PERSONAL HEALTH AND GROOMING
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

A. Provide student with objective sheet.

B. Provide student with information, assignment, and job sheets.

C. Discuss unit and specific objectives.

D. Invite resource person to demonstrate beauty care products or techniques during a class-related HOSA activity.

Examples: Cosmetologist, cosmetic representative, certified dental assistant

E. Assign posters to be made by students depicting aspects of health and beauty.

(NOTE: Compliment students on self-improvement as they progress.)

F. Have students smile and speak each day as they enter classroom. Explain that this is a habit expected in the dental office.

G. Provide students with materials to make smile posters.

(NOTE: Students can make posters throughout year. Encourage student to enter contests at state, national, and local levels.)

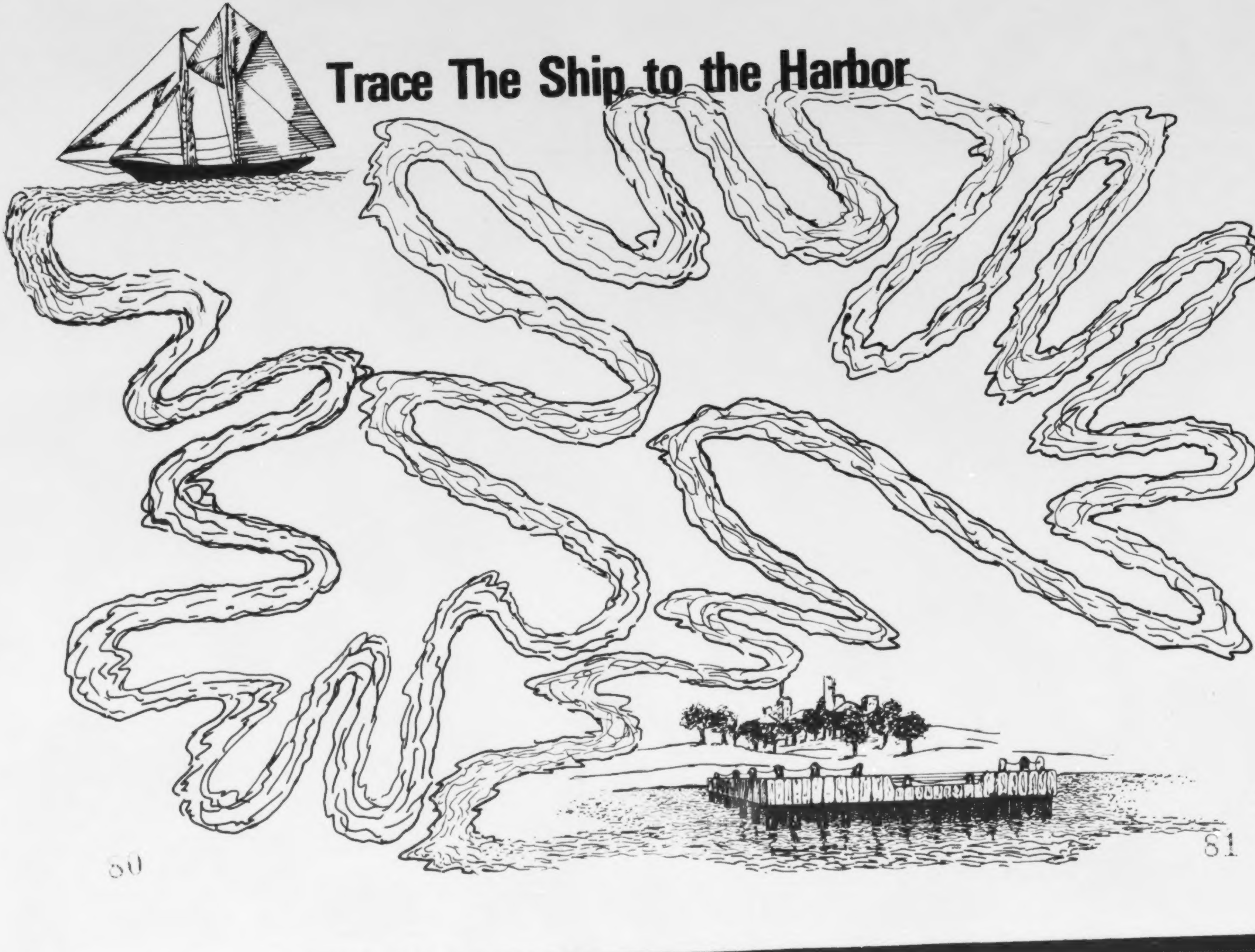
Example: "A smile is worth a million dollars," 3' x 4' poster board, play money, glue, pencil to draw smile, chosen alphabetical letters

H. Provide students with hand mirrors and pencils for completion of "Trace the Ship to the Harbor" activity.

(NOTE: This is used to assist students in using the mirror to floss and to see rights and lefts from the patient's perspective.)

1. Divide students into groups of two.
2. Point out that one student is to hold the mirror while the other student traces the ship to the harbor by looking into the mirror.
3. Instruct students to exchange roles.

Trace The Ship to the Harbor



I. Demonstrate and discuss procedures outlined in the job sheets.

J. Point out to students that they will not be held accountable for terminology in Job Sheet #2. Use terms to motivate students.

K. Lead a class discussion on Assignment Sheet #2.

L. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency Master 1--Methods of Brushing

D. Assignment sheets

1. Assignment Sheet #1--Record Smile Observations

2. Assignment Sheet #2--Evaluate Personal Health/Grooming Habits

E. Job sheets

1. Job Sheet #1--Wash Hands Using Regular Procedure

2. Job Sheet #2--Clean Teeth

F. Test

G. Answers to test

III. Unit references:

A. Otto, James H. et al. *Modern Health.* New York: Holt, Rinehart, and Winston, 1975.

B. Sloan, Jamee. *Health Service Careers.* Stillwater, Oklahoma: Curriculum and Instructional Materials Center/State Department of Vocational and Technical Education, 1979.

IV. Films:

A. "Good Looks/Here and Now." Available from Modern Talking Pictures, 2323 New Hyde Park Road, New Hyde Park, N.Y. 11040.

B. "Let's Be Clean and Neat." Available from Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73152.

C. "A Song of Arthur." Film and weight control literature available from Metropolitan Life Insurance Co., 4701 S. Pennsylvania, Oklahoma City, Oklahoma 73100.

D. "Beautifully Naturally." Filmstrip available from Florida Citrus Commission, P.O. Box 148, Lakeland, Florida 33802.

E. "Brush For Beauty." Available from Oklahoma Dental Foundation for Research and Education, 629 N.W. Expressway, Oklahoma City, Oklahoma, 73118.

(NOTE: Use order number DHTV67.)

F. "Flossing and Brushing No. 1." Available from Oklahoma Dental Foundation for Research and Education, 629 N.W. Expressway, Oklahoma City, Oklahoma 73118.

(NOTE: There is no rental charge for this 8 1/2 minute film, only a postage fee.)

PERSONAL HEALTH AND GROOMING
UNIT III

INFORMATION SHEET

I. Terms and definitions associated with personal health

   A. Health--State of complete physical, mental, and social well-being, not merely the absence of disease or infirmity

   (NOTE: This definition comes from the World Health Organization, a group concerned with world-wide health problems and their prevention.)

   B. Emotion--Any specific feeling, such as fear, hate, love, anger, grief, or joy, with mental and physical states which result from them

   C. Personality--Each individual's unique organization of traits, characteristics, and modes of behavior

   D. Habit--Act first performed voluntarily which after repetition is performed as reflex action

   (NOTE: A habit is a useless act which is associated with nervousness or fidgeting.)

   Examples: Doodling, table drumming, wringing hands, knuckle cracking, nail biting, hair twisting

   E. Mannerism--Exaggeration of speech or behavior

   Examples: Waving hands while talking, slouching, fluttering eyelashes

   F. Attitude--Behavior toward a person, group, thing, or situation representative of conscious or unconscious mental views developed through cumulative experience

   G. Conscience--Knowledge or feeling of right and wrong with a compulsion to do right

   H. Anxiety--State of being uneasy or worried about what may happen

   I. Phobia--Irrational, persistent fear of some particular thing or situation

   (NOTE: Many patients have fears that they associate with the dental office. For example, seeing the syringe and needle often can trigger unpleasant thoughts. Also, fear of the unknown causes problems. Be sure to explain procedures.)

INFORMATION SHEET

II. Factors that influence health and appearance of dental assistant

  A. Cleanliness (Job Sheets #1 and #2)

  (NOTE: Daily cleansing of the entire body with a lather of mild soap and water is probably the single most important health and beauty practice.)

  Examples: Use of products to eliminate body odor, use of products to eliminate breath odor, regular shampooing of hair, cleansing of face upon arising and before going to bed

  B. Food

  (NOTE: A sound diet based on the four basic food groups will lead to good health and an attractive appearance.)

  C. Elimination

  (NOTE: Headaches, unpleasant breath, and poor complexion are often the result of irregular elimination habits.)

  D. Exercise

  E. Sleep

  F. Posture

  G. Eye care

  H. Teeth care (Job Sheet #2)

  I. Habits

  Examples: Smoking, drinking, using harmful drugs

III. Essentials of body cleanliness for dental assistant

  A. Daily bath or shower

  B. Daily use of deodorant or antiperspirant

  C. Daily change of undergarments

  D. Use of only lightly scented colognes, aftershaves, or body powders

  E. Brushing teeth after every meal, if possible

INFORMATION SHEET

   F. Dental check every six months

   G. Using mouthwash morning and night

   H. Clean shaven or neatly-trimmed beard

   I. Clean, neatly trimmed and filed nails

   J. Clean, shiny, and neat hair

IV. Elements of complexion care

   A. Proper cleansing

   (NOTE: Each individual has his/her own type of skin and must find a method for cleansing that is effective. Those with oily skin need to find a soap or astringent that will keep excessive oil under control, and those with dry skin need to find a soap and moisture lotion that are not too heavy but will keep their skin soft and hydrated.)

   B. Proper diet

   (NOTE: A diet using the four basic food groups and drinking plenty of fluids will help insure a healthy complexion.)

   C. Plenty of sleep and rest

   D. Exercise and stimulation

   (NOTE: The skin needs circulatory stimulation, fresh air, and sunshine.)

V. Essentials of well-groomed hair

   A. Clean hair

   (NOTE: Shampoo hair as often as needed for the type of hair you have. Oily hair needs to be shampooed more frequently, and dry hair will need a conditioner to prevent split ends.)

   B. Clean equipment

   (NOTE: At least once a week clean all brushes and combs with warm, soapy water. Avoid borrowing another person's comb or brush.)

   C. Immediate treatment of any scalp conditions

   (NOTE: Dandruff and other scalp conditions can sometimes be treated with over-the-counter products, but if a condition becomes worse and affects a larger area of the hair, professional help from a dermatologist is needed.)

INFORMATION SHEET

D. Selection of a personally appropriate, easy-care hairstyle

(NOTE: Determine a good hairstyle by considering your hair texture, face contour, and even the particular job you will be doing. Hair is a carrier of bacteria. In the dental health field, hair needs to be kept away from face and away from procedures that you are performing. In some institutions, the dress code will determine hairstyle restrictions for both men and women.)

VI. Guidelines for promoting good posture

A. Hold shoulders erect

B. Hold chest high

C. Hold head erect

D. Pull abdomen in

E. Distribute body weight on both feet

(NOTE: Body mechanics and good posture are essential in the dental health field because you are not only a model and a teacher of good health practices, but many jobs entail standing, or even sitting for long periods of time.)

VII. Characteristics of good health (Assignment Sheets #1 and #2)

A. Clear, smooth skin

B. Bright, clear eyes

C. Clean, white teeth

D. Good posture

E. Cheerful disposition and a beautiful smile

VIII. Characteristics of appropriate clothing selection (Assignment Sheet #2)

A. Clothing

1. Spotlessly clean and wrinkle-free

(NOTE: In the dental health field, uniforms are worn. Many varieties and styles in both white and colors are available.)

2. Free from rips, tears, missing buttons, or sagging hemline

3. Properly fitted

INFORMATION SHEET

B. Accessories

1. Shoes kept clean, polished, and in good repair

   (NOTE: Choose duty shoes that fit well. It is better to spend more for good quality shoes than to pay many times for poorer quality shoes that could lead to serious foot problems.,

2. Hosiery free from snags and runs

   (NOTE: If a health worker tends to have problems with circulation, it is advisable to wear a type of support hosiery.)

3. Undergarments appropriate for outer garments

4. Jewelry kept simple, usually a wrist watch only

   (CAUTION: The dental assistant will be handling mercury, which is destructive to jewelry, so rings should not be worn.)

IX. Characteristics of an emotionally mature person

- A. Is considerate of others
- B. Channels emotional drives into constructive activity
- C. Accepts disappointments with courage and composure
- D. Is confident of success and willing to wait and work for it
- E. Adjusts to other people
- F. Creates a relaxed and pleasant social atmosphere

X. Steps to improve personality

- A. Recognize the need for improvement
- B. Have a desire to improve
- C. Evaluate strong and weak points
- D. Develop a plan for improvement
- E. Follow through with your plan

  (NOTE: Personality sometimes means the difference between success or failure as a dental assistant.)

INFORMATION SHEET

XI. Ways to maintain a healthy mental attitude

(NOTE: A career in dental assisting is a rewarding profession, but it can be emotionally demanding due to working with many types of people. Below are methods to assist in maintaining a healthy attitude.)

A. Keep emotions under control

(NOTE: Keep balance in your life by working, sleeping, relaxing, and finding some type of recreation to keep the pressure under control.)

B. Talk it off

(NOTE: Although blowing off your emotional "steam" to a sympathetic listener can work, avoid at all times "talking it off" to a patient.)

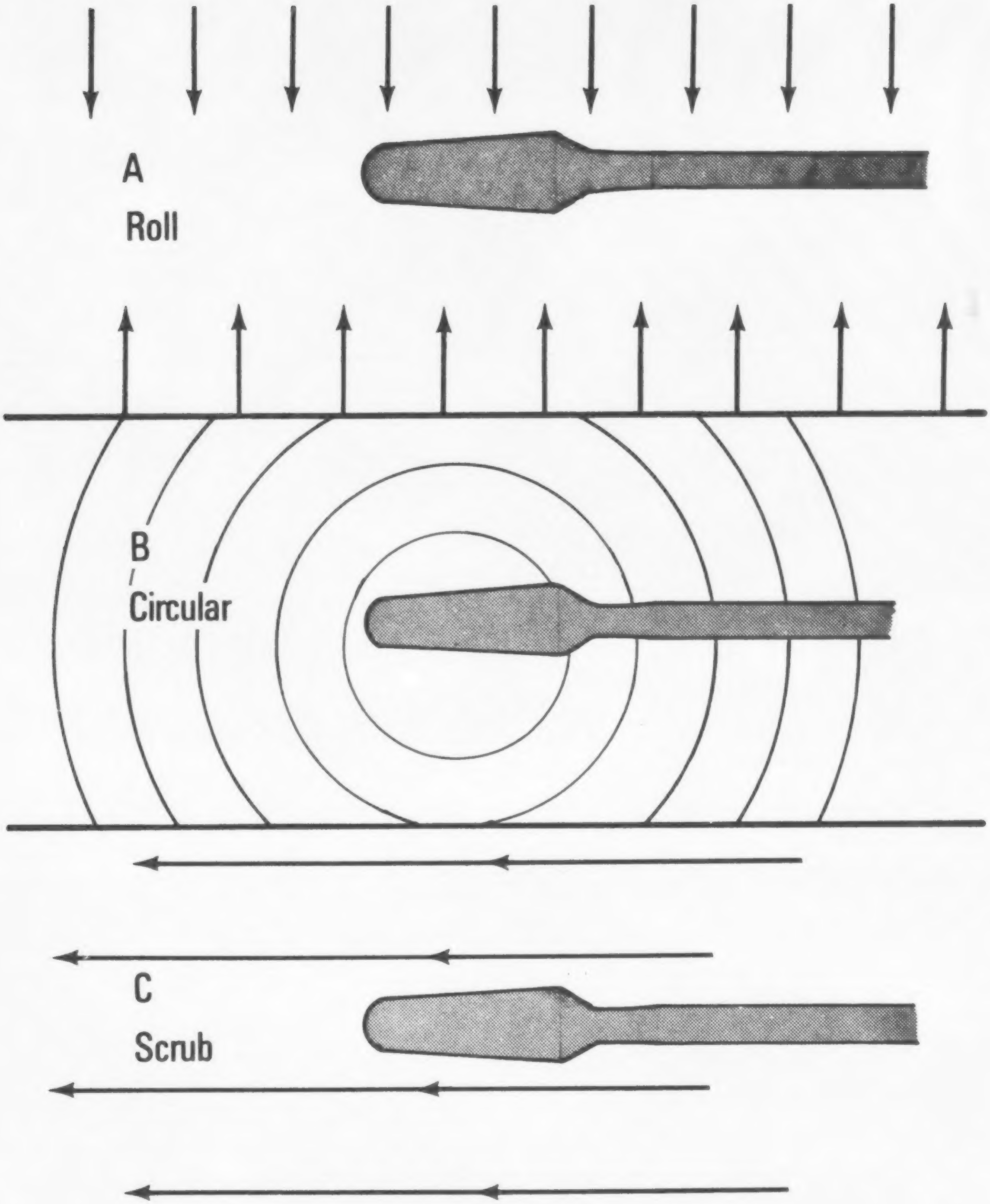
C. Think it off

(NOTE: Consider both sides of problem and attempt to see the other person's viewpoint. You could learn something.)

D. Work it off

(NOTE: Get out there and jog, play tennis, sew. Try to work out your emotions.)

Methods of Brushing


A
Roll
B
Circular
C
Scrub

PERSONAL HEALTH AND GROOMING
UNIT III

ASSIGNMENT SHEET #1--RECORD SMILE OBSERVATIONS

NAME ______________________ SCORE ____________

A smile in the dental health field is very important. Many dental patients are very nervous and fearful. A warm smile and sincere thoughtfulness will be deeply appreciated. The best way to smile is with your eyes and your mouth. This eliminates what we call a smirk.

For the next three days smile at everyone with whom you come in contact. Record how many people smile back at you and other comments. Use the space provided below.

NUMBER OF PEOPLE WHO SMILE	COMMENTS

Now, complete the checklist below of other observations.

- ☐ Did you detect braces?
- ☐ Did you detect partials?
- ☐ Did you detect need for braces?
- ☐ Did you detect capped teeth?
- ☐ Did you detect missing teeth?
- ☐ Did you detect decayed teeth?
- ☐ Did you detect chipped teeth?
- ☐ Did you detect stained teeth?
- ☐ Did you detect dentures?
- ☐ Did you detect any edentulous people?

(NOTE: Edentulous means without teeth.)

PERSONAL HEALTH AND GROOMING
UNIT III

ASSIGNMENT SHEET #2--EVALUATE PERSONAL HEALTH/GROOMING HABITS

NAME______________________ SCORE ____________

Good grooming is essential in the dental health field. Poor personal appearance was identified as the number one reason why people are not hired during an employment interview. Remember, the employer's first impression of you is based on how you look. Furthermore, an employer expects you to continue to "represent" the facility in appearance and action. With this in mind, complete the chart below and then answer the questions which follow.

	Always	Most of the time	Occasionally	Seldom or Never
BODY CLEANLINESS AND CARE				
Do you bathe at least once daily?				
Do you bathe soon after participating in strenuous activity?				
Do you use an effective deodorant daily?				
Do you keep your undergarments fresh and clean?				
POSTURE				
Do you sit properly without slouching?				
Do you stand properly with chin up and shoulders back?				
Do you walk with your head held high and at a fast pace?				
TEETH, MOUTH, AND BREATH				
Do you have a dental checkup at least once a year?				
Do you brush and floss your teeth?				

ASSIGNMENT SHEET #2

	Always	Most of the time	Occasionally	Seldom or Never
Do you use a preventive as often as necessary to avoid bad breath?				
Are you conscious of the fact that too much gum and sweets may be harmful to your teeth?				
HAIR				
Do you avoid combing or brushing your hair in public?				
Do you wash your hair at least once a week?				
Do you brush your hair daily as needed?				
Do you wear your hair in a style that is becoming to you?				
Do you keep your brush and comb clean?				
If you have dandruff, have you tried a medicated shampoo or seen a doctor?				
FACE				
Is your skin clean and well-cared for?				
Is your makeup obvious?				
Do you avoid applying makeup in public?				
Are you clean shaven or is facial hair neatly trimmed?				
HANDS				
Do you refrain from biting your fingernails?				

ASSIGNMENT SHEET #2

	Always	Most of the time	Occasionally	Seldom or Never
Are your fingernails clean and trimmed to a moderate length?				
CLOTHING				
Do you keep your uniform in good repair, that is, no ripped seams, no missing buttons, and no pins, tape, or staples in hems?				
Does your uniform look neat, clean, and pressed?				
Does your uniform fit properly?				
Do you wear shoes that fit properly?				
Do you keep your shoes polished and in good condition? (NOTE: Avoid overrun heels, scuffs, and lack of shoelaces.)				
Do you keep your uniform free from dandruff, lint, and stains?				
Do you ever use clothing as a means to rebel against school and parental authority?				
GENERAL HEALTH AND APPEARANCE				
Do you make an effort to eat a balanced diet each day?				
Do you watch your weight carefully and try to keep it at the recommended weight for you?				
Do you avoid "junk foods"?				

ASSIGNMENT SHEET #2

	Always	Most of the time	Occasionally	Seldom or Never
Do you avoid eating what you know is harmful to your complexion?				
If you had a serious skin problem, would you consult a dermatologist?				
Do you get enough sleep each night?				
Do you have physical checkups regularly?				
Do you get sufficient physical activity?				
Do you avoid extremes in styles?				

1. What are your strengths in your personal grooming habits?

ASSIGNMENT SHEET #2

2. What areas of your personal grooming habits need improvement?

____

____

____

____

____

____

____

____

Adapted with permission from Homemaking Research Laboratories. *Individual Instruction Units in Clothing.* Tony, Wisconsin, 1976.

PERSONAL HEALTH AND GROOMING
UNIT III

JOB SHEET #1--WASH HANDS USING REGULAR PROCEDURE

(NOTE: Due to the possibility of disease transmission in the dental office, it is most important to learn the correct procedure for washing hands.)

I. Equipment and materials

  A. Bar soap

  B. Orange stick

  C. Nail brush

  D. Towels

II. Procedure

  A. Roll or push sleeves up to avoid getting them wet

  B. Wet hands and soap (if it is bar soap)

  C. Soap hands

  D. Wash off soap; rinse, then replace with more soap

  E. Wash palms, using a friction motion

  F. Wash backs of hands, using the same motion

  G. Wash thumbs by rubbing against forefinger, or agitate by using thumb and forefinger of opposite hand

  H. Wash in between fingers, using those of the opposite hand to spread the fingers

  I. Cup fingers and create suction motion (both hands)

  (NOTE: This removes dirt around the fingernails.)

  J. Rinse hands under tap; hold fingers so the water will run off the tips

  K. Repeat the whole process

  (NOTE: Use a nail brush if the fingers and nails are badly soiled or stained. The first washing removes dirt and oils from hands. The second washing removes loosened dirt and insures proper cleansing.)

JOB SHEET #1

L. Dry thoroughly; use towel to dry the cuticles of the nails

M. Clean under the nails with orange stick

N. Use towel to turn faucets off to keep hands sterile

(NOTE: Since the assistant will be handling instruments and supplies that will be used in the patient's mouth, proper hand hygiene is imperative.)

PERSONAL HEALTH AND GROOMING
UNIT III

JOB SHEET #2--CLEAN TEETH

(NOTE: There are three basic techniques for cleaning teeth–Bass, modified Bass [sulcular], and scrub. This job sheet will deal with the Modified Bass Technique. Remember that with any cleaning method teeth should be brushed and flossed at least once a day.)

I. Equipment

  A. Toothbrush (A.D.A. approved)

  B. Dental floss, waxed and unwaxed

  C. Disclosing tablets

  D. Mirror

II. Procedure

(NOTE: Do not use toothpaste while learning to clean your teeth as the foam hides the hard-to-see parts of the mouth.)

  A. Brushing

1. Start with the cheek side (buccal or facio-proximal) surfaces in the upper right molar area
2. Place the head of the brush parallel to the chewing surface (occlusal plane), with bristles behind backside (distal surface) of the last molar (Figure 1)
3. Place the brush at a 45° angle and force bristle ends into the gum attachment (gingiva sulci)
4. Make sure the bristles extend as far as possible between teeth to clean teeth and stimulate gingiva
5. Proceed with a sweeping motion downward or use circular motions (Figures 1 and 2)

FIGURE 1

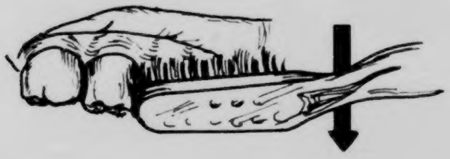
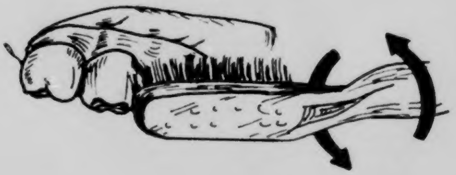


FIGURE 2



JOB SHEET #2

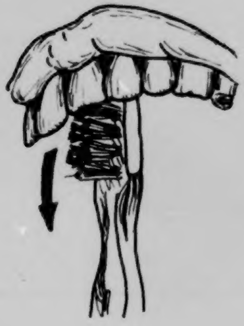
6. Brush each area with a sweeping motion at least five or six times

7. Follow above procedure step by step until all of the upper back (buccal) and front (facial) outside surfaces have been brushed thoroughly

8. Move brush to inside back (lingual posterior) surfaces and continue brushing in the same manner

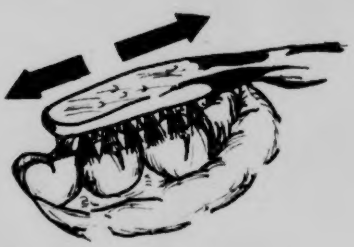
   (NOTE: Hold brush vertically when brushing inside surface of front teeth. See Figure 3.)

FIGURE 3



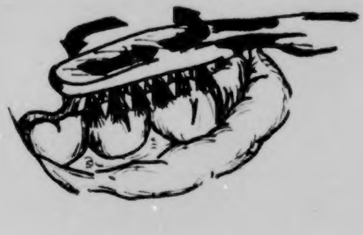
9. Brush chewing (occlusal) surfaces with short back-and-forth (anterioposterior) motion or circular motion (Figures 4 and 5)

FIGURE 4



Bass Technique

FIGURE 5



Sulcular Technique

JOB SHEET #2

10. Brush all lower teeth using the same procedures

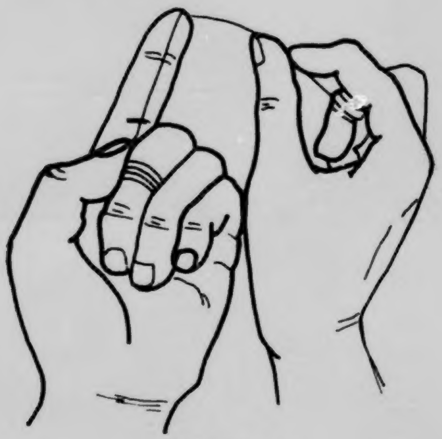
    (NOTE: Children five years of age and younger have twenty teeth or 100 surfaces to clean, and adults have 32 teeth or 160 surfaces to clean.)

B. Flossing

(NOTE: Usually you will want to start at the right upper back [maxillary distal] molar.)

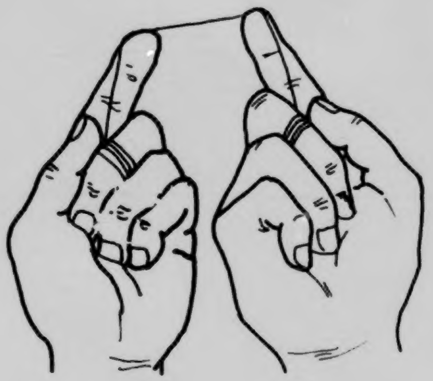
1. Cut a piece of floss about 18 to 24 inches long
2. Wrap ends around middle finger of each hand (Figures 6 and 7)

FIGURE 6



(Maxillary)
Top Teeth

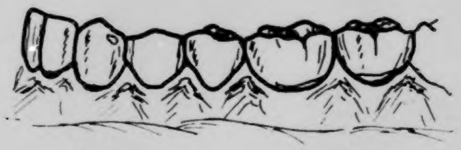
FIGURE 7



(Mandibular)
Bottom Teeth

3. Ease floss gently past the contact area of the teeth to the gum line (gingival sulcus) (Figure 8)

FIGURE 8



(NOTE: Do not forcibly snap the floss past the contact area as it will injure the gingiva.)

JOB SHEET #2

4. Move floss gently back and forth (buccal-lingual) motion, repeating several times

5. Move floss over outside, inside (proximal) surface of each tooth

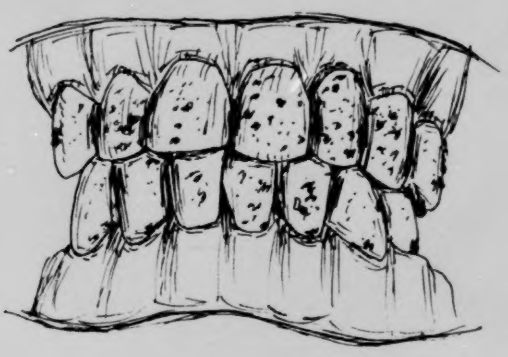
6. Remove floss by sliding through contact area toward the occlusal (chewing) or incisal (biting) edge

7. Continue until all areas are covered

8. Use a disclosing tablet that melts in your mouth or a liquid disclosing solution

   (NOTE: This will show where the plaque is. If you have not cleaned teeth thoroughly, the red stain will adhere to the teeth. See Figure 9.)

FIGURE 9



PERSONAL HEALTH AND GROOMING
UNIT III

TEST

NAME ____ SCORE ____________________

1. Match terms associated with personal health to the correct definitions by placing the correct numbers in the appropriate blanks provided.

_____a. Exaggeration of speech or behavior

_____b. Act first performed voluntarily which after repetition is performed as reflex action

_____c. State of being uneasy or worried about what may happen

_____d. State of complete physical, mental, and social well-being, not merely the absence of disease or infirmity

_____e. Behavior toward a person, group, thing, or situation representative of conscious or unconscious mental views developed through cumulative experience

_____f. Any specific feeling, such as fear, hate, love, anger, grief, or joy, with mental and physical states which result from them

_____g. Each individual's unique organization of traits, characteristics, and modes of behavior

_____h. Knowledge or feeling of right and wrong with a compulsion to do right

_____i. Irrational, persistent fear of some particular thing or situation

1. Emotion
2. Habit
3. Personality
4. Anxiety
5. Mannerism
6. Attitude
7. Health
8. Conscience
9. Phobia

2. List six factors that influence health and appearance of dental assistant.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

3. Select from the list below essentials of body cleanliness for a dental assistant. Mark each correct answer with an "X."

______a. Bath or shower twice a day

______b. Hair styled in beauty shop biweekly

______c. Clean, neatly trimmed and filed nails

______d. Daily use of a deodorant or antiperspirant

______e. Weekly facial

______f. Regular use of foot powder

______g. Use of only lightly scented colognes, aftershaves, or body powders

______h. Brushing teeth after every meal, if possible

______i. Dental check every three years

______j. Using mouthwash morning and night

4. List three elements of complexion care.

a. ______________________________

b. ______________________________

c. ______________________________

5. Select from the list below essentials of well-groomed hair. Mark each correct answer with an "X."

______a. Clean hair

______b. Equipment cleaned once a year

______c. Immediate treatment of any scalp condition

______d. Use of hair spray at least twice daily

______e. Consistent use of medicated shampoo

______f. Selection of a personally appropriate, easy-care hairstyle

______g. Hair brushed vigorously to improve oil production

6. State guidelines for promoting good posture.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

7. Select from the list below characteristics of good health. Mark each correct answer with an "X."

______a. Clear, smooth skin

______b. Deep, dark suntan

______c. Fashionably thin figure

______d. Bright, clear eyes

______e. Good posture

______f. Hyperdeveloped muscles

______g. Cheerful disposition and a beautiful smile

______h. High energy level

______i. Clean, white teeth

8. Describe characteristics of appropriate clothing selection.

a. Clothing

1) ______________________________

2) ______________________________

3) ______________________________

b. Accessories

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

9. Select from the list below characteristics of an emotionally mature person. Mark each correct answer with an "X."

______a. Demands that others adjust to him/her

______b. Is considerate of others

______c. Expects instant success with every effort

______d. Has no effect on social atmosphere

______e. Channels emotional drives into constructive activity

______f. Is severely set back by disappointments

10. Arrange in order steps to improve personality. Place a "1" for the first step, a "2" for the second step, and so on.

    ______a. Have a desire to improve

    ______b. Follow through with your plan

    ______c. Recognize the need for improvement

    ______d. Develop a plan for improvement

    ______e. Evaluate strong and weak points

11. List ways to maintain a healthy mental attitude.

    a. ____

    b. ____

    c. ____

    d. ____

12. Record smile observations.

13. Evaluate personal health/grooming habits.

14. Demonstrate the ability to:

    a. Wash hands using regular procedure.

    b. Clean teeth.

    (NOTE: If activities 12-14 have not been finished before the test, ask your instructor when they should be completed.)

PERSONAL HEALTH AND GROOMING
UNIT III

ANSWERS TO TEST

1. a. 5
   b. 2
   c. 4
   d. 7
   e. 6
   f. 1
   g. 3
   h. 8
   i. 9
2. Any six of the following:
   a. Cleanliness
   b. Food
   c. Elimination
   d. Exercise
   e. Sleep
   f. Posture
   g. Eye care
   h. Teeth care
   i. Habits
3. c, d, g, h, j
4. Any three of the following:
   a. Proper cleansing
   b. Proper diet
   c. Plenty of sleep and rest
   d. Exercise and stimulation

5. a, c, f
6. a. Hold shoulders erect
   b. Hold chest high
   c. Hold head erect
   d. Pull abdomen in
   e. Distribute body weight on both feet
7. a, d, e, g, i
8. a. Clothing
      1) Spotlessly clean and wrinkle-free
      2) Free from rips, tears, missing buttons, or sagging hemline
      3) Properly fitted
   b. Accessories
      1) Shoes kept clean, polished, and in good repair
      2) Hosiery free from snags and runs
      3) Undergarments appropriate for outer garments
      4) Jewery kept simple, usually a wrist watch only
9. b, e
10. a. 2
    b. 5
    c. 1
    d. 4
    e. 3
11. a. Keep emotions under control
    b. Talk it off
    c. Think it off
    d. Work it off
12. Evaluated to satisfaction of instructor
13. Evaluated to satisfaction of instructor
14. Performance skills evaluated to satisfaction of instructor

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

UNIT OBJECTIVE

After completion of this unit, the student should be able to evaluate and improve human relations skills in order to be effective in dealing with co-workers and patients. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with human relations and self-improvement to the correct definitions.
2. Select from a list reasons for human relations training.
3. Select from a list true statements about physical and emotional characteristics of personality.
4. List the three sides of self.
5. State the values of having self-respect or a good self-concept.
6. List the reasons some people have little self-respect.
7. Select from a list characteristics of people with little self-respect.
8. Name ways to protect self-respect.
9. List ways to achieve self-control.
10. Select from a list ways to show respect for others.
11. List the steps for creating a change in attitude.
12. Complete a self-analysis.
13. Complete values assessment activities periodically.
14. Develop a plan for self-improvement.

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

A. Have students talk about themselves for three minutes. They will be surprised how long three minutes is and how much they can learn about each other from this activity. An alternative to this activity is to divide the class into pairs. Have each pair learn three things about the other person that he or she did not know before. Then let each person share the newly found knowledge with the class.

B. Give students an object like a raw egg, lemon, or potato to carry with them everywhere they go for three days. Have penalties for students who are seen without their objects. They should give their object a name, care for it, arrange for a sitter if it cannot be taken someplace, and make accessories for it, such as a basket or carton. The students will enjoy the game but will also be able to have a good discussion about assuming responsibility and thinking about others. Some programs have received good publicity from activities such as this.

C. Give a pretest since some schools have an active human relations program.

D. Order films.

E. Make transparencies.

F. Provide student with objective, information, and assignment sheets.

G. Discuss unit and specific objectives, information sheet, and assignment sheets. Stress the importance of human relations training. Use examples of people being fired for poor human relations skills, people receiving promotions and raises for good human relations skills, and the importance of being a productive and cooperative employee, particularly as increased minimum wage laws cause many employers to question the hiring of students.

H. Periodically review your class discussions and assignment sheets by having the students complete in writing statements such as the following:

I learned . . .

I relearned . . .

I feel . . .

I noticed . . .

I was pleased . . .

I was displeased . . .

I was surprised . . .

I. Have each student write down the names of all the other students. Give the following instructions: "Beside each name write a characteristic you don't like about that person or an area where you would like to see some improvement. (Everyone can improve something.) Also write a characteristic you admire in each person." Collect the papers and cut them into slips so you can give each student all the slips of paper with comments about that student. You may want to type each student's list to disguise the handwriting. This can be an excellent exercise for the students to see themselves as others see them. (Don't forget to include yourself in this activity.) Be sure to prepare the students well ahead of time so they will not get mad or waste all their time trying to figure out who said what about them. Repeat this exercise again later in the year to check for improvements and changes.

J. Reproduce the Self-Improvement Contracts in Assignment Sheet #8 as needed.

K. Make sure that Assignment Sheets #4 to #8 are not used all at once but are spread periodically throughout the year.

L. Invite guest speakers, such as a hair stylist, beautician, cosmetic representative, physical education teacher, YMCA or YWCA director, health spa manager, or nutritionist.

M. Use the *I Am Lovable and Capable* presentation by Sidney Simon.

(NOTE: This booklet is available for $0.50 from Argus Communications, 740 Natchez Avenue, Niles, Illinois 60648.)

N. Remember that students may not have matured enough to share the same values as an adult. While you may participate in the activities, refrain from giving your viewpoint so strongly or so early in the discussion as to influence the students' opinions. They must be allowed to form their own values. So, be a good listener and remove any pressure for them to respond the way they think you want them to respond.

Also, it is possible to have fun with this unit, but the final outcome should be serious thinking about values and repetitive patterns in the students' behavior.

O. Take a piece of butcher paper that will fit the length of a wall in your room and write in big letters the word "RESPECT" to decorate the room and set the mood for this unit.

P. Get students started on the aerobics physical fitness program. Keep charts of the students' progress posted in the room.

(NOTE: See reference on next page.)

Q. Give test.

R. Reteach if necessary.

S. Test again until minimum standard is reached.

T. Help students conduct a human relations seminar for other parts of the school.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters

1. TM 1--Self-Concept

2. TM 2--Three Sides of Self

D. Assignment sheets

1. Assignment Sheet #1--Distinguish Between Positive and Negative Attitudes Related to Job Situations

2. Assignment Sheet #2--Do You See Yourself as Others See You?

3. Assignment Sheet #3--How You Get Along with Others

4. Assignment Sheet #4--Self-Analysis I

5. Assignment Sheet #5--Self-Analysis II

6. Assignment Sheet #6--Miracle Products

7. Assignment Sheet #7--Values Scale

8. Assignment Sheet #8--Develop a Plan for Self-Improvement

E. Answers to assignment sheets

F. Test

G. Answers to test

III. Unit references:

A. Mattingly, John, and Kitzmiller, Charles. *Values for Distributive Education.* Columbus: Ohio State University, Distributive Education Materials Laboratory, 1974.

B. Nach, R. A. *Work-in-Text for Earl Nightingale's Lead the Field.* Chicago: Nightingale-Conant Corporation, The Human Resources Company, 1974.

C. *Human Relations.* rev. Columbus: Ohio State University, Distributive Education Materials Laboratory.

D. Hiserodt, Donald D. *Psychology and Human Relations in Marketing.* Dallas: Gregg Division/McGraw-Hill Book Co., 1969.

E. Russon, Allen R. *Personality Development for Business.* 4th ed. Dallas: South-Western Publishing Co., 1973.

F. Lacy, Richard C., and Park, Ok D. *Job Application and Interview.* Columbia: University of Missouri, Instructional Materials Laboratory.

G. Chapman, Elwood N. *Your Attitude Is Showing.* Chicago: Science Research Associates, Inc., 1964.

H. Luter, Robert R. *Personal Development for Young Men.* Austin: University of Texas, Instructional Materials Laboratory, Distributive Education Department, 1967.

I. Burbrink, Pauline W. *Personal Development for Girls.* Austin: University of Texas, Instructional Materials Laboratory, Distributive Education Department, 1972.

J. Wilkens, Emily. *A New You: The Art of Good Grooming.* New York: G. P. Putnam's Sons, 1965.

K. Whitcomb, Helen, and Cochran, Laura A. *Charm for Miss Teen.* Dallas: Gregg Division/McGraw-Hill Book Co., 1969.

L. Tolman, Ruth. *Charm and Poise for Getting Ahead.* New York: Milady Publishing Corp., 1967.

M. Famularo, Joseph J., and Atkinson, Phillip S. *Executive Profile: A Young Man's Guide to Business Success.* Dallas: Gregg Division/ McGraw-Hill Book Co., 1967.

N. Simon, Sidney B.; Howe, Leland W.; and Kirschenbaum, Howard. *Values Clarification: A Handbook of Practical Strategies for Teachers and Students.* New York: Hart Publishing Co., Inc., 1972.

O. Eggland, Steven A., and Williams, John W. *Human Relations In Business.* Dallas: South-Western Publishing Co., 1977.

P. Cooper, Kenneth. *Aerobics.* New York: Bantam Books, Inc., 1972.

Q. Newman, Mildred, and Berkowitz, Bernard. *How to Be Your Own Best Friend.* New York: Random House, 1973.

IV. Films:

(NOTE: Oklahoma teachers may order films on a free-loan basis from the Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074. Out-of-state teachers must purchase films from the addresses below.)

A. "Pack Your Own Chute." Available from Ramic Productions, 60 West 57th Street, New York, New York 10019.

B. "A Day in the Life of Bonnie Consolo." Available from Arthur Barr Productions, Inc., 3490 East Foothill Boulevard, Box 5667, Pasadena, California 91107.

C. "Is It Always Right to Be Right?" Available from Roundtable Films, Inc., Department CA 50, 113 North San Vincente Boulevard, Beverly Hills, California 90211.

D. "You - In Public Service: Good Grooming." Available only from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074.

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

INFORMATION SHEET

I. Terms and definitions

   A. Human relations--Getting along with people

   B. Personality--All the physical, mental, and emotional characteristics that make up a person

   C. Respect--Recognizing the worth of self and the worth of other people, their property, and opinions

   D. Success--Making progress toward achieving a worthy goal

   E. Attitude--Feeling or emotion

   F. Self-concept--How people feel about themselves (Transparency 1)

   (NOTE: This is affected greatly by past experiences and definitely affects one's future success in social situations. We project our feelings of self-worth. If people feel good about themselves, usually their peers will treat them that way. The opposite is also true. If people feel bad about themselves, their peers will tend to reinforce their feelings about themselves.)

   Example: Self-concept determines if a person is shy, a high achiever, or a leader

II. Reasons for human relations training (Assignment Sheet #1)

   A. There is more demand for qualified dental assistants today

   B. There are more group practices and specialized fields today, which require more group-oriented assistants

   C. Research proves that good human relations increase the size of the dental practice

   D. Dental profession must treat all types of people equally

   (NOTE: The profession, therefore, must require assistants to show a positive attitude to patients and auxiliary personnel.)

   E. More formality is generally required in offices because an authority structure exists

   Examples: You might say to a friend, "Hi! Hey, your hair looks great."

   You might say to a patient, "Good afternoon, Miss Jones. Your new hair style is very becoming, but your hair always looks nice."

INFORMATION SHEET

F. A large percentage of dental assistant duties are human relations skills

G. Ninety percent of all jobs lost are lost due to inability to get along with people

H. Reaching one's goals often depends upon the ability to get along with others

III. Physical and emotional characteristics of personality

A. Physical characteristics

1. Affect self-confidence

2. Determine first impressions to a great extent

(NOTE: First impressions may be right or wrong, but they are important because they are often lasting impressions.)

3. Usually must be accepted

Examples: Height, bone structure

4. May often be altered

Examples: Diet, makeup, clothing, careful attention to appearance

B. Emotional characteristics

1. Reasons for emotions may be the opposite of what they appear

Example: Being jealous of someone's affection does not mean you love the person deeply; it says, instead, that you are insecure about your own worth

2. Emotions should not be denied but should be released in a positive way

3. People should express themselves through a few good activities which they can do reasonably well

(NOTE: Many people try to be everything at once: musician, school political leader, athlete, scholar, business person, civic leader, and actor.)

4. It is necessary to be polite and friendly even when a person does not feel like it

INFORMATION SHEET

IV. Three sides of self (Transparency 2, Assignment Sheet #2)

  A. Person you think you are

  B. Person others think you are

  C. Person you are

V. Values of having self-respect or a good self-concept

  (NOTE: Having self-respect or a good self-concept is not the same as being selfish, self-centered, or boastful.)

  A. Makes it possible to work on self-improvement

  B. Makes it easier to respect others

  C. Is necessary before others can respect you

VI. Reasons some people have little self-respect

  A. We are so familiar with ourselves we tend to take ourselves for granted

  B. We tend to minimize what we accomplish

  C. We tend to believe others can reach heights we cannot

  D. We receive negative reinforcement all our lives

    Example: Name calling, such as "You dummy!"

    (NOTE: We should not allow environment to affect our level of self-respect.)

VII. Characteristics of people with little self-respect

  A. Rebellious feelings

  B. Quiet resentment which builds up until the person blasts back at others

  C. Withdrawing from others

    Examples: Extreme shyness, not participating in activities

  D. Anger at self

  E. Excessive drinking and use of drugs

  F. Doing extreme things to gain popularity and attention

INFORMATION SHEET

VIII. Ways to protect self-respect

(NOTE: The difference is often in the use of "I" instead of "you." A person can state feelings without "being bossy" or offending others. In other words, a person can assume responsibility for own actions without pushing values on others.)

A. Communicate feelings to others without giving advice

Examples: Response to "Do you mind if I smoke?"--"Smoke really does bother me. Thank you for asking."

Response when in a car with a reckless driver--"Driving fast bothers me." INSTEAD OF "Why don't you slow down!"

Response to "Let's leave work early today. The boss is gone."--"I don't want to break company rules." INSTEAD OF "You shouldn't take off early when the boss isn't here."

B. State plans without whining or threatening others

Example: Use "I plan to leave for the party at 7:00. If you're late, then I'll go ahead." INSTEAD OF "If you don't shape up and start arriving on time I'm going to be mad." OR "Why don't you help me?"

C. Improve relations without putting yourself down

(NOTE: Avoid the "Oh, whatever you want to do" attitude.)

D. Learn to accept compliments and gifts graciously

Example: Response to "You look nice today."--"Thank you." INSTEAD OF "This old thing?" OR "My hair needs washing."

(NOTE: It is just as important to learn to accept a compliment or gift graciously as it is to give one.)

IX. Ways to achieve self-control

A. Work a little longer when you are tired and want to stop working

B. Do not allow small irritations and teasing to bother you

(NOTE: Create the art of smiling as smiling erases irritation and creates joy.)

C. Avoid temptation to do or be what you don't want

INFORMATION SHEET

X. Ways to show respect for others (Assignment Sheet #3)

A. Show understanding and appreciation of other people's feelings

B. Realize that other people's feelings make sense to them

C. Be aware of other people's feelings as well as what they are saying

Examples: "Oh, . . . I feel okay" may be said with discouragement

"I . . . I . . . have to go to the dentist tomorrow" may be said with anxiety

"I just saw Joel" may be said with anger

"All right! If you say so!" may be said with anger

D. Respond to emotions first

(NOTE: It is hard to "tell it like it is" or to give the straight facts without first hearing a person's emotions.)

Examples: A person says, "We never do things my way."

Responding to emotions first:
"What I hear you saying is that you feel I'm not very thoughtful of you?"

Not responding to emotions first:
"What do you mean? We never do it my way!"

E. Show restraint with obnoxious people

Example: Do not yell back just because someone yells at you

(NOTE: You are just as small a person as they are if you let this happen.)

F. Remember birthdays, special occasions, kindnesses shown, and troubled times with visits, cards, or some other kind of token

Examples: "Dad, you sure look nice today," "Mother, the dinner was so good, you must have spent a lot of time preparing this dish."

G. Help people feel at ease, important, and useful

(NOTE: When you become concerned about other people, you forget about yourself. You become at ease with others and, thus, more important and useful to other people.)

INFORMATION SHEET

H. Try to find something you can like in every person

I. Realize that every human being is a worthy individual

J. Return borrowed items promptly to their correct places

K. Remember manners and common courtesies

Examples: Please; thank you; yes, Doctor

L. Do not overuse the word "I" when it is not necessary to actively defend your self-respect

Example: The student organization president may say, "Look what we accomplished" INSTEAD OF "Look what I accomplished" or, "Our appointment book is scheduled until Thursday," INSTEAD OF "I don't have any appointment time open until Thursday."

XI. Steps for creating a change in attitude

(NOTE: Some people find it helpful to memorize these steps and to repeat and apply them when they face troublesome circumstances.)

A. Realize that you can change no one but yourself

(NOTE: Therefore, a person must adjust to problem situations or get out of the problem situation.)

B. Smile

C. Say something pleasant once every hour

D. Change negative statements to positive statements

Example: "We're never going to finish this" CAN BE CHANGED TO "If we work together, we can finish this"

E. Change a negative problem to a positive situation

Examples: Putting forth a lot of effort, showing sincere desire

(NOTE: If the previous steps have been followed, this step will be much easier.)

F. Keep a mental picture of the kind of person you want to be

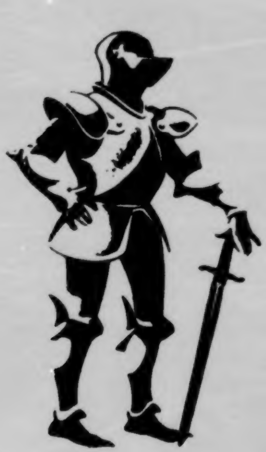
(NOTE: If you do this, dreams will become realities.)

Self-Concept

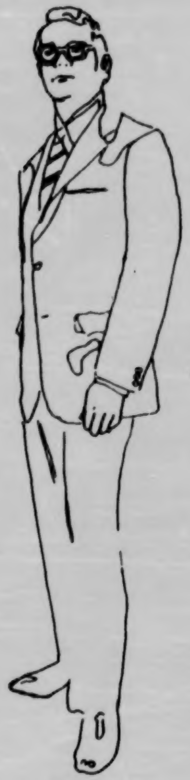
"No One Can Make You Feel Inferior
Without Your Consent"

-Eleanor Roosevelt

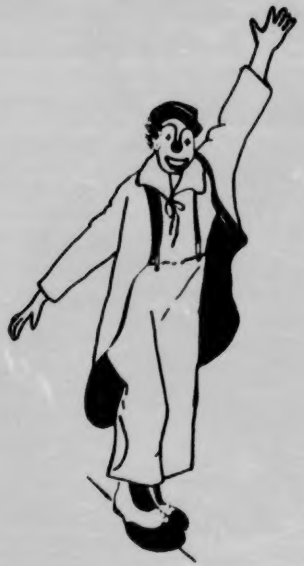
Three Sides of Self



The Person You Think You Are



The Person You Are



The Person Others Think You Are

TM 2

DA - 131-A

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ASSIGNMENT SHEET #1--DISTINGUISH BETWEEN POSITIVE AND NEGATIVE ATTITUDES RELATED TO JOB SITUATIONS

NAME________________________________ SCORE______________

The following are situations concerning types of behavior in job situations. Under each behavior a positive or negative attitude has been shown. List the attitude shown and the person affected.

Example: "I have cleaned the dental trays and I have 15 minutes before quitting time. I think I'll find someone who needs some help."

Attitude--Positive

Who is affected?--Co-workers

1. "I think I'll leave work five minutes early because I came in five minutes early. Nobody will ever know."

   Attitude--______________________________

   Who is affected?--__________________________

2. "Dr. Cavity told me to do this task step by step until I learned the procedure correctly. I'll do it *my* way. It'll be lots quicker."

   Attitude--______________________________

   Who is affected?--__________________________

3. "The receptionist just told me off. She's not my boss. I'm going to get even with her."

   Attitude--______________________________

   Who is affected?--__________________________

4. "My dentist needs to do some extra work on the patient in operatory one. Should I take care of another patient or remain with the dentist? Perhaps I should ask him."

   Attitude--______________________________

   Who is affected?--__________________________

ASSIGNMENT SHEET #1

5. "I'm not paid to clean dental sinks, mop around the chair, and clean up the bathroom. I'm a *professional* and I'm paid to do only the *professional* duties."

Attitude--____

Who is affected?--____________________________________

6. "Dr. Cavity is going to a workshop. If I offer to work those days to keep the office open, should I ask for equal days off?"

Attitude--____

Who is affected?--____________________________________

DA - 135-A

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ASSIGNMENT SHEET #2--DO YOU SEE YOURSELF AS OTHERS SEE YOU?

NAME____________________________________ SCORE________________

It is important not only to be your best self but to project a truthful image of your best self. Rate yourself on the following scale and then have someone else rate you as they see you. (A 5 on the scale would mean that you greatly project this quality. A 1 on the scale would mean you have very little of this quality.) Look up the meaning of any words you don't understand. You may wish to repeat the process periodically to check on improvement or to ask other people to rate you. Use a pen or pencil different from one used by the other person doing the rating so you can distinguish between your markings and the other person's.

CHARACTERISTICS	RATING				
Sense of humor	5	4	3	2	1
Poised	5	4	3	2	1
Systematic	5	4	3	2	1
Courteous	5	4	3	2	1
Cooperative	5	4	3	2	1
Apathetic	5	4	3	2	1
Easily impressed	5	4	3	2	1
Pays attention	5	4	3	2	1
Determined	5	4	3	2	1
Extroverted	5	4	3	2	1
Practical	5	4	3	2	1
Creative	5	4	3	2	1
Patient	5	4	3	2	1
Alert	5	4	3	2	1
Perfectionistic	5	4	3	2	1
Pessimistic	5	4	3	2	1
Logical; reasonable	5	4	3	2	1

ASSIGNMENT SHEET #2

CHARACTERISTICS	RATING				
Leadership qualities	5	4	3	2	1
Impulsive	5	4	3	2	1
Sensible	5	4	3	2	1
Generous	5	4	3	2	1
Sociable	5	4	3	2	1
Tactful	5	4	3	2	1
Rude	5	4	3	2	1
Deceitful	5	4	3	2	1
Considerate	5	4	3	2	1
Sincere	5	4	3	2	1
Forgetful	5	4	3	2	1
Kind	5	4	3	2	1
Inhibited	5	4	3	2	1
Restless	5	4	3	2	1
Possessive	5	4	3	2	1
Irritable	5	4	3	2	1
Loyal	5	4	3	2	1
Selfish	5	4	3	2	1
Thoughtful	5	4	3	2	1
Independent; self-governing	5	4	3	2	1
Emotionally mature	5	4	3	2	1
Self-control	5	4	3	2	1
Obeys rules	5	4	3	2	1
Perseverant	5	4	3	2	1
Economical	5	4	3	2	1

ASSIGNMENT SHEET #2

CHARACTERISTICS	RATING				
Jealous	5	4	3	2	1
Naive	5	4	3	2	1
Dependable	5	4	3	2	1
Stubborn	5	4	3	2	1
Critical	5	4	3	2	1
Optimistic	5	4	3	2	1
Easily depressed	5	4	3	2	1
Friendly	5	4	3	2	1
Positive	5	4	3	2	1
Ambitious	5	4	3	2	1
Conceited	5	4	3	2	1
Good natured	5	4	3	2	1
Honest	5	4	3	2	1
Sarcastic	5	4	3	2	1
Inferiority complex	5	4	3	2	1
Enthusiastic	5	4	3	2	1
Resourceful	5	4	3	2	1
Intellectual	5	4	3	2	1
Suspicious	5	4	3	2	1
Shrewd	5	4	3	2	1
Sympathetic	5	4	3	2	1
Emotional	5	4	3	2	1
Self-conscious	5	4	3	2	1
Domineering	5	4	3	2	1
Argumentative	5	4	3	2	1

ASSIGNMENT SHEET #2

CHARACTERISTICS	RATING				
Broadminded	5	4	3	2	1
Efficient	5	4	3	2	1
Introverted	5	4	3	2	1
Modest; humble	5	4	3	2	1

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ASSIGNMENT SHEET #3--HOW YOU GET ALONG WITH OTHERS

NAME______________________________ SCORE_______________

A successful person should know how to get along with others. By the results of this self-test, you will see how you are doing. Check your answers using the analysis sheet at the end of this assignment sheet.

1. You meet a person you immediately do not like. You would:

   a. Try to find a topic of conversation of common interest.

   b. Avoid the person.

   c. Try to put the person in his or her place.

2. You are offered a job for which you are not qualified. You would:

   a. Admit your inadequacy and offer to learn on the job.

   b. Refuse to try.

   c. Try to bluff through it.

3. When dealing with people such as sales representatives, waiters, or waitresses, you:

   a. Usually smile and say something pleasant.

   b. Are nice if they are pleasant to you.

   c. Treat them impersonally.

4. You have been overcharged or undercharged in a business transaction. You would:

   a. Ask the person to recheck the bill.

   b. Pay the bill without saying anything.

   c. Tell the person he or she has cheated you.

5. When you meet a person who is handicapped, you:

   a. Treat the person as you would anyone else.

   b. Go out of your way to be especially nice.

   c. Try to avoid the person.

ASSIGNMENT SHEET #3

6. A friend has just bought an outfit which you think is unbecoming. He or she asks if you like it. You would say:
   - a. "Yes, I like the color. What would you think about changing the length of the pants?"
   - b. "How's the weather today?"
   - c. "It looks terrible."
7. You honestly feel that you:
   - a. Are interested in most people.
   - b. Are only really comfortable with your own clique.
   - c. Are bored by most people.
8. In a store you are in no hurry, but the person after you is rushed. You:
   - a. Suggest that the person go ahead of you.
   - b. Make your selection because it is your turn.
   - c. Take an extra long time just to calm him or her down.
9. When you meet people of different races or religions, you:
   - a. Consider them as human beings like yourself.
   - b. Have a secret feeling of fear.
   - c. Are convinced your way of life is superior.
10. After a school picnic you find there is no trash basket. You would:
    - a. Take the papers, bottles, and food home with you.
    - b. Try to hide the trash on the property.
    - c. Leave it on the ground.

ASSIGNMENT SHEET #3

SCORING AND ANALYSIS

SCORING

Give yourself 5 points for every "a" answer, 3 points for every "b" answer, and no points for "c" answers. Add up your score.

ANALYSIS

35 to 50 points: You are very good in your relationships with others because you respect others and greet them with interest and courtesy. You are liked by your friends and those with whom you deal in a casual way.

18 to 34 points: You do very well with others most of the time, but you are sometimes self-centered and forget to put yourself in the other person's shoes. Try working toward more of those "a" answers, and you will find that living is more pleasant than it is now.

0 to 17 points: You are having trouble either because you are too shy or too aggressive. You know which! Good human relationships are like anything else in life; they take practice. Select someone you admire. Analyze his or her actions; then adapt those traits to your own personality.

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ASSIGNMENT SHEET #4--SELF-ANALYSIS I

NAME________________________ SCORE__________

(NOTE: Assignment Sheets #4 through #8 should not be used all at once but should be used periodically throughout the year.)

Answer the following questions honestly as they apply to your job and/or classroom experiences by checking the most appropriate column. Then analyze the statements checked "Always" and "Never."

	Never	Sometimes	Always
1. Are you able to act naturally under all circumstances?			
2. Do you seek opportunities to meet those in positions of authority?			
3. Do you avoid criticizing others?			
4. Are you able to give credit to others for what they do, rather than seek first to obtain credit for yourself?			
5. Do you try to have a positive attitude?			
6. Do you have bad breaks?			
7. Do you approach your work confidently?			
8. Do you think your friends are more capable than you are at most things?			
9. Do you try to improve your attitudes?			
10. Do you feel others are luckier than you are?			
11. When you fail, do you come right back?			
12. Do you treat patients and co-workers as though they were important?			
13. Do you expect to succeed?			
14. Are you honest?			
15. Are you willing to accept more responsbility on your job?			

ASSIGNMENT SHEET #4

	Never	Sometimes	Always
16. Are you free from bad habits which will hinder your progress?			
17. Do you discharge your duties promptly and efficiently and with little or no supervision?			
18. Do you finish the things you start?			
19. Do you feel your present job can help you in your future career?			
20. When you see your friends succeed, do you wish you were doing what they are?			
21. Do you feel that limitations are things you put on yourself?			
22. Do you try to appreciate, understand, and show a sincere interest in patients and co-workers?			
23. Do you try to learn as much as you can at work?			
24. At work, do you try to be a real service to people on the job?			
25. Do you try to improve your memory of names, patient likes and dislikes?			
26. Do you work to be free from superstitions and prejudices?			
27. Do you listen attentively to what people say without interrupting them?			
28. Do you observe closely what is going on around you and understand the significance of it?			
29. By reading and studying, do you keep informed about current events, your work, your future career, and subjects of popular interest?			

ASSIGNMENT SHEET #4

	Never	Sometimes	Always
30. Can you be depended upon to keep your promises to patients and auxiliary personnel?			
31. Do you defend from unjust criticism the persons and things (dentist, auxiliary personnel) with which you are identified?			
32. Do you work toward your goals?			
33. Do you measure success by money?			
34. Do you try to achieve one goal at a time?			
35. Do you believe we become what we think about, what we concentrate on achieving?			
36. Do you believe the most useful goals are specific goals?			
37. Do you feel successful people do not have problems?			
38. Do you worry about past mistakes and failures?			
39. Do you control your temper?			
40. Do you often feel enthusiastic about something you wish to do?			
41. Are you able to make decisions about everyday things easily?			
42. Are you able to interest yourself in the details of your job?			
43. Are you careful not to hold grudges against people?			
44. Do you usually look on the bright side of situations?			
45. Are you able to work pleasantly with others?			
46. Do you believe that we receive rewards by giving service to others?			

ASSIGNMENT SHEET #4

	Never	Sometimes	Always
47. Do you try to find ways to help other people at work?			
48. Do you believe it is important for a person in business to be civic-minded?			
49. Do you find your dealings with others at work very frustrating?			
50. Do you try to be cooperative?			
51. Do you avoid carrying tales and gossiping about others?			
52. Do you try to see the other person's point of view?			
53. Do you refrain from telling others what you think of them?			
54. Do you avoid arguments?			
55. Do you avoid making fun of others?			
56. Do you keep out of other people's business?			
57. Do you avoid finding fault with everyday little things?			
58. Do you keep your personal troubles to yourself on the job?			
59. Do you feel honesty is the way to success?			
60. Do you really enjoy your work?			
61. When you feel "down" do you try to work harder?			
62. Do you think about others on special occasions, such as their birthdays and in sorrow and happiness, and do you send them some expression of your thoughts?			
63. Do you congratulate your friends upon their achievements?			

ASSIGNMENT SHEET #4

	Never	Sometimes	Always
64. Do you learn, remember, and use the names of the people you meet?			
65. Do you know the rules of etiquette and observe them?			
66. Do you think about the rights of others before you think of your own?			
67. Do you show respect for everyone regardless of position?			
68. Are you appreciative for everything people do for you and always thank them?			
69. Do you believe people who work hard make it unnecessarily difficult for others?			
70. Do you try to improve?			
71. Do you want to be like your present friends?			
72. Do your friends try to operate at their best potential?			
73. Do you realize how much your friends influence your achievements?			
74. Are you well-groomed?			
75. Do you do just enough to get by?			
76. Do you smile often?			
77. Do you really know that you are a unique and valuable person?			
78. Do you think about exciting possibilities in your future work?			
79. Do you try to improve your human relations skills?			
80. Do you feel you are mature in your attitudes, outlook, and actions?			

ASSIGNMENT SHEET #4

	Never	Sometimes	Always
81. Do you try to see yourself as others see you?			
82. Do you feel you could increase your productivity at work?			
83. Do you feel that wanting money is wrong?			
84. Do you believe there is any value in accumulating wealth?			
85. Do you believe how much money we earn is determined by how hard it would be to replace us?			
86. Do you feel it is wrong for your employer to make a profit?			
87. Do you realize that profit provides jobs?			
88. Do you try to make every day count?			
89. Do you jump from one thing to another when trying to accomplish things?			
90. Do you try to plan your time wisely?			
91. Do you believe that for every effect there is a cause?			
92. When there is a problem at work or at school, do you try to be part of the solution?			
93. Do you get impatient with yourself?			
94. Are you patient with others?			
95. Do you feel you will be rewarded in some way if you do well at work or at school?			
96. Do you refrain from exaggeration?			
97. Do you avoid flattering people for personal gain?			
98. Do you try to avoid embarrassing others?			

ASSIGNMENT SHEET #4

	Never	Sometimes	Always
99. Do you return what you borrow to its proper place?			
100. Do you accept at least partial blame for failures?			
101. Do you respect your parents, elders, employers, and people in authority?			
102. Do you have a tendency to try to top a remark made by a previous speaker during a conversation?			
103. Are you usually ill at ease with strangers?			
104. Are you critical and bossy?			
105. Do you ridicule people who are not present?			
106. Do you laugh at others' mistakes?			
107. Are you suspicious of other people's motives?			
108. Do you avoid talking about yourself, what you own, and your successes?			
109. Do you use belittling words and jokes about those of different sex, race, politics, religion, and beliefs?			
110. Do you believe that successful people frequently ask themselves, "How can I give more service to others?"			
111. Do you use illness as an excuse for not doing well on a job?			
112. Do you try not to prejudge patients and other people at work?			

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ASSIGNMENT SHEET #5--SELF-ANALYSIS II

NAME____ SCORE__________________

(NOTE: Assignment Sheets #4 through #8 should not be used all at once but should be used periodically throughout the year.)

Check the appropriate column. No one will see this analysis but you. It will not affect your grade. It is simply to help you analyze yourself as you work on self-improvement.

Yes	No	Maybe	WILL YOU . . .
			1. write letters to the editor?
			2. write to *Dear Abby*?
			3. ever quit smoking?
			4. marry for money?
			5. run for public office?
			6. be an officer of a civic club?
			7. never get fatter with maturity?
			8. always watch soap operas?
			9. marry someone of another religion?
			10. not consider getting engaged without a ring?
			11. always read the sports page of the newspaper?
			12. read gossip columns?
			13. travel in Europe?
			14. attend cultural events?
			15. always read the editorials of the newspaper?
			16. subscribe to *Playboy* or *Playgirl*?
			17. never read the newspaper?
			18. have a swimming pool?

ASSIGNMENT SHEET #5

Yes	No	Maybe	WILL YOU . . .
			19. subscribe to the *Wall Street Journal*?
			20. always read the comics page of the newspaper?
			21. always read the front page of the newspaper?
			22. have a large family?
			23. watch more than four hours of TV per day?
			24. turn on the radio immediately upon entering your house?
			25. insist on a large wedding?
			26. go to a nice restaurant once a week?
			27. do a good deed once a day?
			28. move if a member of a minority race moves into your neighborhood?
			29. move far away from home?
			30. work with younger children?
			31. turn down your favorite dessert?
			32. date two people at once?
			33. drive recklessly?
			34. lock all doors when you leave the house?
			35. cheat on your spouse?
			36. dislike your mother?
			37. have a maid?
			38. take office supplies from your business?
			39. call in sick when you were up late the night before?
			40. vote for a conservative?
			41. have trouble sleeping?

ASSIGNMENT SHEET #5

Yes	No	Maybe	WILL YOU . . .
			42. go to a psychiatrist?
			43. vote for a liberal?
			44. order a cola rather than a cocktail when with friends?
			45. experiment with drugs?
			46. move in with relatives after you are married?
			47. have a picture of a movie star in your room?
			48. enjoy your in-laws?
			49. join the military?
			50. own land?
			51. have regular physical and dental checkups?
			52. work with the sick and elderly?
			53. continue your education?
			54. give a present to someone for no reason other than that you like them?
			55. read a self-improvement book?
			56. give up to the point of considering suicide?
			57. refuse to take money that is not yours?
			58. not work because the supervisor is gone?
			59. set goals?
			60. assume new responsibilities on the job?
			61. envy other people?
			62. break a promise?
			63. defend someone you think was wronged?
			64. try to do too much at once?
			65. worry so much you'll get sick?

ASSIGNMENT SHEET #5

Yes	No	Maybe	WILL YOU . . .
			66. blow your stack in front of people at work?
			67. get even with someone who wronged you, no matter how long it takes?
			68. tell an ethnic joke?
			69. decide not to compliment someone?
			70. be suspicious of most people's motives?

What can you conclude about yourself from this experience?

Adapted with permission from Sidney B. Simon, Leland W. Howe, and Howard Kirschenbaum. *Values Clarification: A Handbook of Practical Strategies for Teachers and Students*. New York: Hart Publishing Co., Inc., 1972.

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ASSIGNMENT SHEET #6--MIRACLE PRODUCTS

NAME______________________________ SCORE______________

(NOTE: Assignment Sheets #4 through #8 should not be used all at once but should be used periodically through the year.)

You are watching television and see the following products and services advertised with clever slogans and jingles. Select five miracle products that you value the most. Then select five products that you value the least. Discuss your choices in small groups and see if you can discover any patterns in your choices. What values are the basis of your choices? Are there choices that do not fit the pattern? Answer these questions at the end of the list of products. Use another sheet of paper if necessary.

1. Charles Atlas's and Miss Universe's Body Beautiful Potion--Makes you look like you want to look
2. Albert Einstein's Smart Pills--Guarantees a high I.Q. and good grades with a lot of common sense
3. Saint Peter's Living Formula--Always see black and white and shades of gray clearly
4. Six Million Dollar Man and Bionic Woman Plan--Earn millions and all that money will buy in a matter of weeks
5. Lovable Lucy's Love Potion--Guarantees that you will love and be loved by everybody and everything at all times
6. Linda Lovelace's Secrets--Lets you know how to have sex appeal
7. Pop U. Larity's Power Packed Remedy--Guarantees friends, offices, honors, and all kinds of accolades
8. Joe Jobgetter Agency--Any job you want with free training program to make you qualified as you climb the ladder of success
9. Farrah's Famous Fame Course--Fame and fortune can be yours from movies, television, records, and Las Vegas shows
10. Ecology Rules Book--Clean up air, water, and the smoking section of your business in five easy steps
11. Issue Solving Medicine--Cures all social ills from war to floods to abortion questions
12. Discrimination Darla's Protest Songsheet--Learn the words and guitar chords to the top protest songs of this decade; see immediate progress or your money back

ASSIGNMENT SHEET #6

13. Jet Lag Julius's Travel Agency Package Plan--World-wide travel; stay in nice hotels, drink in nice cocktail lounges, take pictures in all tourist traps around the world

14. Civic Service Soul's Formula--Guides you in building parks, raising money for the handicapped, and other worthwhile projects

15. Carter-Reagan Formula--Gain political power and prestige in just one-hundred and one easy steps and campaign speeches

16. All in the Family New and Improved Formula--Harmony in the family; you will have acceptance and freedom without accompanying hassles

17. Self-Concept Clara's Self-Confidence Pills--Know self; accept self; improve self; like self

18. Happy Howard's Jolly Pills--Be happy and positive in all, and I do mean in all, situations

19. Peace of the Rock--Real inward peace that spreads to all

20. Health Food Nutrients--Insures good digestion, no stress, no wrinkles, and no bad colds

21. Patient Patty's Patented Formula--Long suffering accomplished with confidence and assurance and without worry

22. Dandy Dan's Dynamite Dual-Packed Bottle of Self-Control Glue--Helps you stick to any project you start with a bonus of an extra two ounces of self-discipline free of charge

23. Kind-N-All Conditioner--Helps you be manageable and nice to all people in spite of their rottenness

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HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ASSIGNMENT SHEET #7--VALUES SCALE

NAME______________________________ SCORE______________

(NOTE: Assignment Sheets #4 through #8 should not be used all at once but should be used periodically throughout the year.)

Decide where on the following scales you would place yourself. Discuss your placement with the class if you wish. Do not go along with the crowd just because you fear being different or because you do not want to think seriously about the issue. Also, be careful not to always mark the middle of the scale. It would be rare for someone to always be exactly in the middle of every issue.

1. How far would you go to be popular?

Do anything, including risking health and safety	Do nothing at all

2. How much personal freedom do you have?

All decisions are made for you	Complete freedom of choice

3. How much freedom do you want?

All decisions are made for you	Complete freedom of choice

4. How do you feel about what you wear?

Clothes are more holey than righteous	Even iron your underwear

5. How do you feel about fighting?

Argue at the drop of a hat	Love and hearts and flowers all the time; sickeningly sweet

ASSIGNMENT SHEET #7

6. How are you about making decisions?

Can't even decide what to wear	Don't waste a second; never at a loss for an opinion

7. How do you feel about competition?

Avoid all competition	Walk over anyone to win any way you can; it's not how you play the game that counts but winning, winning, winning

8. How much do you want from the family?

Totally dependent on family; no outside interests or friends	Would rather be rid of the family

9. How do you feel about school?

Think school is a Communist plot	Love school so much the teachers added you to the payroll

10. How much do you talk to other people?

Your lips are sealed	Talking all the time

11. What will you eat?

Avid health food fan	Addicted to junk food

12. How do you feel about marriage and divorce?

We-Can-Always-Get-A-Divorce	Death-Do-Us-Part

ASSIGNMENT SHEET #7

13. How do you handle money?

Spend all, give it away, never enough for necessities

Tightwad through and through

14. What percentage of the time are you happy?

0%

100%

15. How much do you worry?

Don't-Give-A-#"&@

Worry-Wart

16. How much do you try to please authority figures like supervisors or teachers?

Rebel

Apple Polisher

17. How would you raise your child?

Permissively

Strictly

18. How many friends do you need?

Send yourself love letters

Buy sodas for everyone

19. How patriotic are you?

Tear down the establishment

Love it or leave it

ASSIGNMENT SHEET #7

20. How helpful are you to others?

Wouldn't do anyone a favor	Handy, handy, handy

21. How much time do you spend watching TV and cruising main street?

Educational stations and trips to the grocery store	Late, late, late shows and the Indianapolis 500

22. How informed are you about current events?

Nothing but the sports page and Ann Landers	Headines to comics and the evening news on TV

23. How clearly do you write?

Penmanship is perfect	Can't read anything you write

24. How do you celebrate Halloween?

One trick after another	Goody Two Shoes

25. How are you at compliments?

Can't receive one	Can't give one

26. How often do you smile?

Look like you ate a pickle and then froze	Forced, unnatural, sticky sweet

27. How positive are you?

If anything can go wrong it will	Life is just a bed of roses

ASSIGNMENT SHEET #7

Now, think of at least five things that would describe who you are. Then, make up your own rating scale for each characteristic. For example, you might want to have a scale for being an employee, club member, son or daughter, or honest person. Would other people rate you the same way?

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HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ASSIGNMENT SHEET #8--DEVELOP A PLAN FOR SELF-IMPROVEMENT

NAME________________________________ SCORE________________

(NOTE: This assignment should be repeated after each of Assignment Sheets #4 to #7.)

1. Now that you have begun to analyze yourself, choose some way in which you want to change or to improve. It is one thing to *want* to do something; it is another thing to *do* something about it. You may decide to study more industriously or to do a better job in your work. You may decide to work on an emotional or physical fitness problem. You may decide to diet. Whatever improvement you choose to work on, fill in one of the contracts on the following page. Write your name on the first line of the contract. Fill in the number of days in which the contract is to be in effect. On the line beginning BEHAVIOR write the one change you are going to work on. On the line beginning REWARDS list one or more activities you find most enjoyable to you which you will do when the contract is completed. Examples of enjoyable activities might include: purchasing an album or tape, going hunting or skiing, eating chocolate cake and ice cream, playing tennis, going to a basketball game, riding a bicycle, watching TV, sleeping. On the line beginning PENALTIES list one or more of the enjoyable activities you will give up if you do not live up to your contract.

2. Token Rewards--Another way of giving yourself rewards is by the token system. With this system you give yourself a check mark for each hour or day that you live up to your contract. Then you give yourself the reward when you have earned a certain number of check marks. No penalty is needed when you use the token reward system, but you will need a calendar or a progress chart on which to record the check marks you earn. With the token reward system you will fill in the contract in the same way, except that you list the number of check marks you must accumulate in order to earn the reward.

3. This contract should be personal. Fill it out periodically, such as once a week or whenever you record your hours and pay in the classroom.

ASSIGNMENT SHEET #8

SELF-IMPROVEMENT CONTRACT

I, ______________________________, do hereby enter into the following agreement with myself. I will perform the behavior stated below for a period of ________________ days. In return, I will receive the rewards listed below.

BEHAVIOR ____
REWARDS ____

If I fail to live up to this contract, these penalties will take effect.

PENALTIES ____

____
Signature

· ·

SELF-IMPROVEMENT CONTRACT

I, ______________________________, do hereby enter into the following agreement with myself. I will perform the behavior stated below for a period of ________________ days. In return, I will receive the rewards listed below.

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REWARDS ____

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____
Signature

· ·

SELF-IMPROVEMENT CONTRACT

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BEHAVIOR ____
REWARDS ____

If I fail to live up to this contract, these penalties will take effect.

PENALTIES ____

____
Signature

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

TEST

NAME ________________________________ SCORE ______________

1. Match the terms on the right to the correct definitions by placing the correct numbers in the blanks provided.

_____a. Making progress toward achieving a worthy goal

_____b. Recognizing the worth of self and the worth of other people, their property, and opinions

_____c. All the physical, mental, and emotional characteristics that make up a person

_____d. Getting along with people

_____e. Feeling or emotion

_____f. How people feel about themselves

1. Human relations
2. Personality
3. Respect
4. Success
5. Attitude
6. Self-concept

2. Select from the list below reasons for human relations training. Mark each correct answer with an "X."

_____a. There are fewer service occupations today

_____b. There are more group practices and specialized fields today, which require more group-oriented assistants

_____c. Research proves that good human relations increase the size of the dental practice

_____d. Dental profession must treat all types of people equally

_____e. More formality is generally required in offices because an authority structure exists

_____f. Few duties of the dental assistant are human relations skills

_____g. Ninety percent of all jobs lost are lost due to inability to get along with people

_____h. Reaching one's goals often depends upon the ability to get along with others

3. Select from the list below true statements about physical and emotional characteristics of personality. Mark each correct answer with an "X."

______a. Physical characteristics are not important

______b. Physical characteristics affect self-confidence

______c. Physical characteristics must usually be accepted

______d. Physical characteristics may often be altered

______e. Reasons for emotions may be the opposite of what they appear

______f. Emotions should be denied

______g. Sometimes it is just necessary to release emotions in a destructive way

______h. It is hypocritical to always be polite and friendly if you don't like someone

4. List the three sides of self.

a. ______________________________

b. ______________________________

c. ______________________________

5. State the values of having self-respect or a good self-concept.

a. ______________________________

b. ______________________________

c. ______________________________

6. List two reasons some people have little self-respect.

a. ______________________________

b. ______________________________

7. Select from the following list characteristics of people with little self-respect. Mark each correct answer with an "X."

______a. Rebellious feelings

______b. Humbleness

______c. Quiet resentment which builds up until the person blasts back at others ______d. Self-centered

______e. Unselfish

______f. Withdrawing from others

______g. Anger at self

______h. Excessive drinking and use of drugs

______i. Doing extreme things to gain popularity and attention

8. Name two ways to protect self-respect.

a. ____

b. ____

9. List two ways to achieve self-control.

a. ____

b. ____

10. Select from the list below ways to show respect for others. Mark each correct answer with an "X."

______a. Show understanding and appreciation of other people's feelings

______b. Realize that other people's feelings make sense to them

______c. Be aware of what others are saying, disregarding their feelings

______d. Respond to emotions first

______e. Tell obnoxious people just what you think

______f. Remember birthdays, special occasions, kindnesses shown, and troubled times with visits, cards, or some other kind of token

______g. Help people feel at ease, important, and useful

______h. Try to find something you can like in every person

______i. Realize that every human being is not necessarily a worthy individual

______j. Return borrowed items promptly to their correct places

______k. Remember manners and common courtesies

11. List the steps for creating a change in attitude.

    a. ____________________

    b. ____________________

    c. ____________________

    d. ____________________

    e. ____________________

    f. ____________________

12. Complete a self-analysis.

13. Complete values assessment activities periodically.

14. Develop a plan for self-improvement.

    (NOTE: If activities 12, 13, and 14 have not been finished before the test, ask your teacher when they should be completed.)

HUMAN RELATIONS AND SELF-IMPROVEMENT
UNIT IV

ANSWERS TO TEST

1. a. 4
   b. 3
   c. 2
   d. 1
   e. 5
   f. 6
2. b, c, d, e, g, h
3. b, c, d, e
4. a. Person you think you are
   b. Person others think you are
   c. Person you are
5. a. Makes it possible to work on self-improvement
   b. Makes it easier to respect others
   c. Is necessary before others can respect you
6. Any two of the following:
   a. We are so familiar with ourselves we tend to take ourselves for granted
   b. We tend to minimize what we accomplish
   c. We tend to believe others can reach heights we cannot
   d. We receive negative reinforcement all our lives
7. a, c, f, g, h, i
8. Any two of the following:
   a. Communicate feelings to others without giving advice
   b. State plans without whining or threatening others
   c. Improve relations without putting yourself down
   d. Learn to accept compliments and gifts graciously

9. Any two of the following:
    a. Work a little longer when you are tired and want to stop working
    b. Do not allow small irritations and teasing to bother you
    c. Avoid temptation to do or be what you don't want
10. a, b, d, f, g, h, j, k
11. a. Realize that you can change no one but yourself
    b. Smile
    c. Say something pleasant once every hour
    d. Change negative statements to positive statements
    e. Change a negative problem to a positive situation
    f. Keep a mental picture of the kind of person you want to be
12. Evaluated to satisfaction of instructor
13. Evaluated to satisfaction of instructor
14. Evaluated to satisfaction of instructor

HOSA
UNIT V

UNIT OBJECTIVE

After completion of this unit, the student should be able to select from a list benefits of being a HOSA member and match chapter officers to their duties. The student also should be able to recite the Oklahoma Association of HOSA creed. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with HOSA to the correct definitions.
2. Select from a list benefits of HOSA membership.
3. Select from a list the purposes of the HOSA organization.
4. Select from a list other student vocational organizations.
5. Write the HOSA motto.
6. Name the official HOSA colors.
7. Describe the official HOSA dress code for members.
8. Identify the colors of the official HOSA emblem.
9. Name the organizational levels of HOSA.
10. Match chapter officers to their duties.
11. Name essentials of a good chapter.
12. Select from a list criteria for selection of voting delegates.
13. Name types of chapter activities.
14. Complete a chart showing leadership training activities for HOSA.
15. Recite the Oklahoma Association of HOSA creed.

HOSA
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information and assignment sheets.

   C. Make transparency.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Invite alumni members to speak to class about the benefits and rewards of being involved in HOSA.

   G. Provide students with background of HOSA, giving important events and dates.

   H. Review last year's scrapbook of activities, illustrating how students can get involved, learn, achieve, and be rewarded through involvement.

   I. Develop a local slide program involving students from your school. Show the different activities offered and change it from year to year to involve current students.

   J. Make a bulletin board for the first day of school to show benefits of belonging to HOSA.

   K. Have students visit other student vocational organizations to observe activities.

   L. Have two or three students visit a civic club and let them present information about HOSA.

   M. Invite other HOSA chapters to installations and meetings.

   N. Invite resource people to speak about their career field or professional involvement in organizations.

   O. Set up a simulated parliamentary procedure for the students to practice technique.

   P. Encourage attendance at leadership training conferences and sponsor students on trips to meetings.

   Q. Give test.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Transparency master: TM 1--HOSA Emblem

  D. Assignment sheets

    1. Assignment Sheet #1--Color Me HOSA

    2. Assignment Sheet #2--Recite the Oklahoma Association of HOSA Creed

  E. Test

  F. Answers to test

III. Unit references:

  A. *Oklahoma Health Occupations Student Organization Handbook*. Stillwater: Oklahoma State Department of Vocational and Technical Education, 1974.

  B. *Official Guide*. Washington, D.C.: Vocational Industrial Clubs of America, Inc., n.d.

  C. *DECA Handbook*. 7th ed. Falls Church, Virginia: Distributive Education Clubs of America, 1972.

  D. *Official FFA Manual*. Alexandria, Virginia: Future Farmers of America, 1977.

IV. Films:

  A. "You Pack Your Own Chute." Ramic Productions. 58 West 58th Street. New York, New York 10019.

  B. "Mr. Chairman." Encyclopedia Brittannica. 425 No. Michigan Avenue, Chicago, Ill. 60601.

  C. "Agriculture's New Generation." Venard Films. Box 1332, Peoria, Ill. 61601.

  (NOTE: The above films are available to Oklahoma teachers only from the Curriculum and Instructional Materials Center, Oklahoma State Department of Vocational and Technical Education, 1515 W. Sixth Street, Stillwater, OK 74074. Out-of-state teachers must order the films from the above addresses.)

HOSA
UNIT V

INFORMATION SHEET

I. Terms and definitions

  A. HOSA (Health Occupations Students of America)--National organization for students enrolled in health occupations programs

  (NOTE: The state organization is known as the Oklahoma Association of HOSA.)

  B. State HOSA advisor--Person appointed by the state supervisor and approved by executive council to advise and provide leadership for the state organization

  C. Local chapter advisor--Person(s) designated by local school administration to advise and provide leadership for the local HOSA chapter

  D. Voting delegate--Student chosen to represent local chapter in balloting on questions of business or election of officers at state or national conferences

  E. Active member--Student enrolled in an approved health occupations educational program; must be member of the state organization in order to hold offices on the local, state, and national levels

  (NOTE: The two divisions of active members are Secondary and Full-Time Adult.)

  F. Alumni member--Former active member who has remained in good standing with his/her chapter

  G. Honorary life member--Individual who has made contributions to development of HOSA in Oklahoma and whose membership has been approved by the state executive council

  (NOTE: Alumni and honorary life members have all rights except serving as voting delegates, holding elective office, or participating in state contests.)

  H. Professional member--Person who may be associated with or who has participated in the development of health occupations student organizations as approved by the state organization

II. Benefits of HOSA membership

  A. Provides guidance to student who seeks to develop knowledge, skills, and behavioral characteristics necessary in preparing for a future in a health career.

INFORMATION SHEET

B. Helps student gain self-confidence through development of leadership skills and abilities

C. Helps student associate and exchange information with other students who have the same interests

D. Introduces student to a wide variety of health career choices

E. Helps student develop responsibility through service to the local community

F. Provides student with opportunity to make realistic career choices

III. Purposes of the HOSA organization

A. To develop programs and activities which will develop physical, mental, and social well-being of the individual and produce qualities of leadership, character, good citizenship, ethical practices, and respect for the dignity of work

B. To develop self-actualization of each member which will contribute to meeting the individual's psychological, social, and economic needs

C. To build the students' confidence in themselves and their work by teaching them to assume responsibilities and develop occupational competencies and social skills that lead to realistic choices of careers and successful employment in the field of health

D. To promote interorganizational relationships with professional groups, businesses, industries, and other student organizations

E. To recognize individual achievement in scholarship, occupational skills, or services rendered by providing awards

F. To promote involvement in current health care issues, environmental concerns, and survival needs of the community, the nation, and the world

G. To promote the establishment of local HOSA chapters

H. To prepare students for participation in their professional organizations

IV. Other student vocational organizations

A. DECA (Distributive Education Clubs of America)

B. FHA-HERO (Future Homemakers of America-Home Economics Related Occupations)

C. FFA (Future Farmers of America)

INFORMATION SHEET

D. VICA (Vocational Industrial Clubs of America)

E. FBLA (Future Business Leaders of America)

F. AIASA (American Industrial Arts Student Association)

V. HOSA motto--The Hands of HOSA Mold the Health of Tomorrow

VI. Official HOSA colors

A. Hospital white

B. Navy blue

C. Maroon accent

VII. Official HOSA dress code for members (Assignment Sheet #1)

A. Female

1. Navy blue blazer
2. White or navy blue pants or skirt
3. Maroon scarf with white HOSA imprint
4. Plain, tailored, white shirt with winged collar

B. Male

1. Navy blue blazer
2. White or navy blue pants
3. Maroon tie with white HOSA imprint
4. Plain, tailored, white shirt

VIII. Colors of the official HOSA emblem (Transparency 1)

A. Background, Health Occupations Students of America, HOSA, hands, and figure--White

B. Triangle and Founded 1976--Blue

C. Outer band--Maroon

IX. Organizational levels of HOSA

A. Local chapters

(NOTE: Finances needed to operate the local chapters will depend upon the program planned for the year.)

INFORMATION SHEET

B. State Chapters

(NOTE: State organization finances are provided through dues from members.)

C. National HOSA

(NOTE: National organization finances are provided through yearly dues.)

X. Chapter officers and their duties

A. President--Presides over all chapter meetings; serves as ex officio member on all committee meetings; coordinates and supervises all the efforts of chapter officers and committees

B. Vice-president--Assists the president; presides over chapter activities in the absence of the president; serves as chairperson of program committee

C. Secretary--Prepares and reads minutes of all chapter meetings; maintains membership list and record of attendance; answers all chapter correspondence promptly; counts and records all votes; reads all communications at meetings; prepares an agenda for meetings

D. Treasurer--Keeps financial records of the chapter

E. Sentinel--Sets up and secures meeting rooms; attends the door during meetings and greets visitors; makes sure meeting room is comfortable; secures the meeting without interruption

F. Parliamentarian--Informs all members on correct parliamentary procedures

G. Reporter--Prepares news releases about HOSA activities for all media

H. Historian--Gathers and assembles all materials in preparation for the chapter scrapbook

I. Chaplain--Takes charge of all religious activities during chapter meetings and banquets

XI. Essentials of a good chapter

A. Capable officers and leaders

B. Responsibility for chapter activities shared by all members

C. Challenging program of activities

D. Proper recordkeeping

INFORMATION SHEET

E. Well-planned, regularly held chapter meetings

F. Support from school officials and community leaders

G. Active member participation in chapter activities

XII. Criteria for selection of voting delegates

A. Active participation in all chapter meetings and assigned committees

(NOTE: This person should demonstrate leadership abilities.)

B. Successful achievement in classroom assignments and laboratory activities while maintaining achievement in other school subjects

(NOTE: Each chapter is entitled to be represented by two voting delegates.)

XIII. Types of chapter activities

(NOTE: Activities promote growth of individual members; improve school, home, and community; and serve as showcases for the local chapter, the national organization, and vocational education.)

A. Professional activities

Examples: Guest speakers, vocation-related films, chapter field trips, special recognition banquets, state and national conferences, competitive events

B. Civic activities

Examples: Benefits for charitable organizations or other service agencies; booths and exhibits at state fairs; assisting community officials with health projects

C. Service activities

Examples: Thanksgiving or Christmas food baskets for people in need, involvement with senior citizen groups

D. Social activities

Examples: Get-togethers for prospective members, reception for faculty members, chapter picnics or dances

E. Fund-raising activities

Examples: Sales projects, car washes, bake sales, dinners

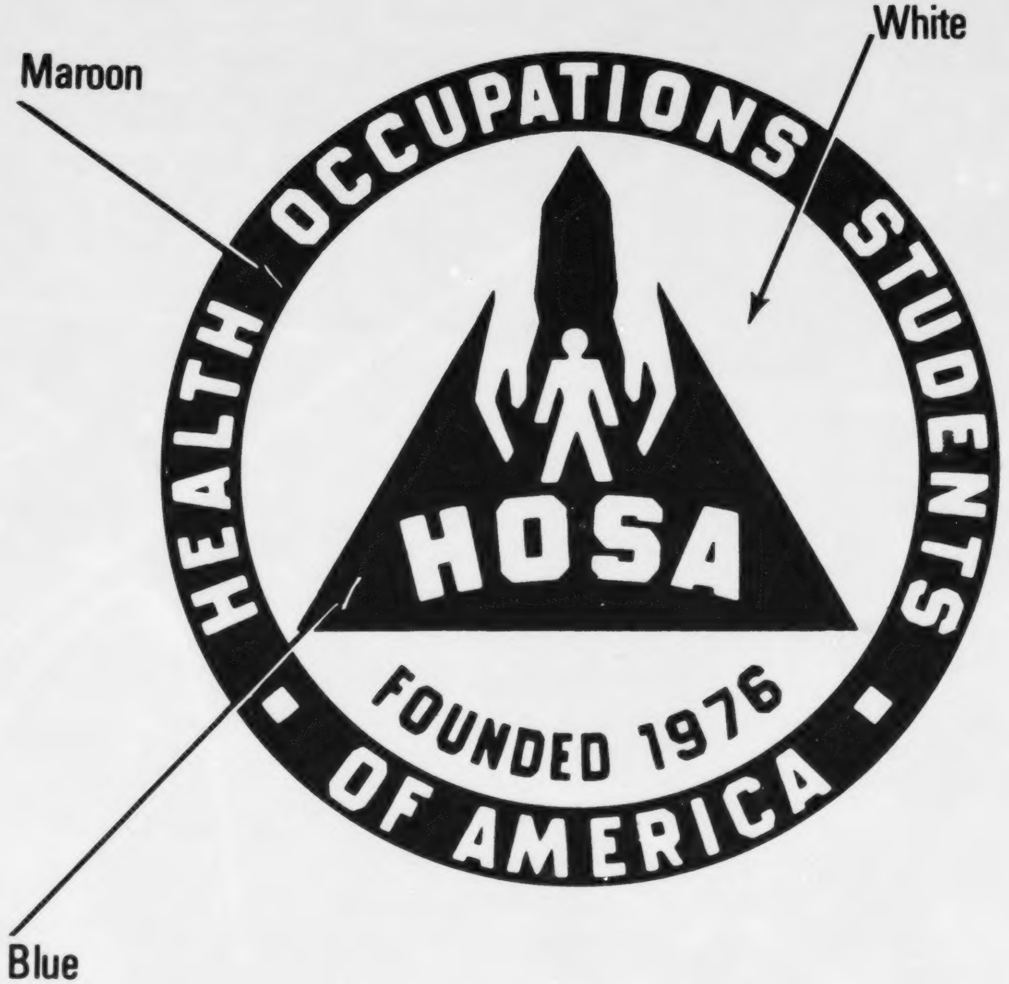
(NOTE: Local chapters can finance their group through fund-raising events but these must be approved by school administration.)

INFORMATION SHEET

XIV. Leadership training activities for HOSA

Meetings	Activities and Participants
Vocational Leadership Institute (STATE) (NOTE: Since HOSA does not elect its state officers until fall, each chapter advisor is asked to submit the names of potential leaders in HOSA, consisting of students who will be members of a HOSA chapter the next year and would be willing to run for office.)	Each summer state officers of the vocational student organizations attend a meeting that provides leadership training (NOTE: This meeting includes members from FFA, FHA, DECA, VICA, FBLA, AIASA, and HOSA.)
Fall HOSA Leadership Conference (STATE)	All members of Oklahoma Association of HOSA can participate; local chapter officers are given leadership training; elections of secondary and full-time officers are held
Spring HOSA Leadership Conference (STATE)	All members of Oklahoma Association of HOSA can participate; all members are provided with leadership training; provides competitive events and leadership-scholarship skills
National HOSA Convention	Each spring all members of HOSA can participate in competitive events and leadership-scholarship skills; election of national officers is held

HOSA Emblem

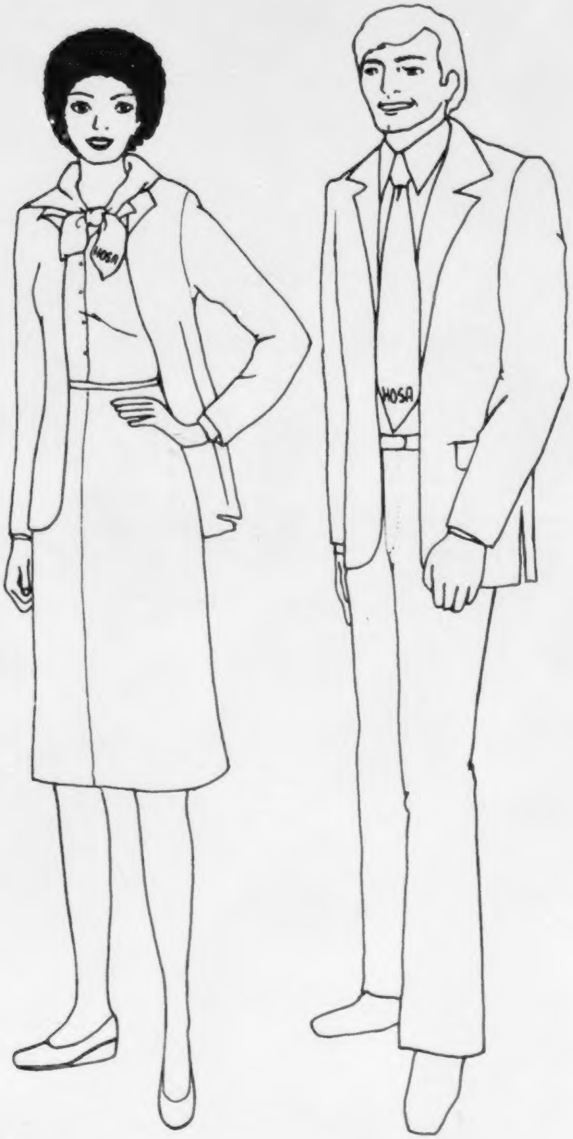

Maroon
White
HEALTH OCCUPATIONS STUDENTS
HOSA
FOUNDED 1976
OF AMERICA
Blue

HOSA
UNIT V

ASSIGNMENT SHEET #1--COLOR ME HOSA

NAME ______________________________ SCORE ________________

Using the information about the official colors for the uniform, color the figures below.



HOSA
UNIT V

ASSIGNMENT SHEET #2--RECITE THE OKLAHOMA ASSOCIATION OF HOSA CREED

NAME____________________________________ SCORE _________________

Read each paragraph carefully and try to memorize it. Then move on to the next paragraph until each one is memorized. Practice by saying the creed with a classmate and be able to recite it to the satisfaction of the instructor.

We are the HOSA's of Oklahoma. We face the future with understanding, feeling, and a dedication to improve health.

We strive to improve personal and community health by helping others to help themselves. We are concerned with the physical, social, and mental well-being of each individual.

Health is our first goal in having a clear conscience toward all communicable and noncommunicable disorders, disabilities, and other malfunctions.

Our main concern is to promote health services to each and every individual, for we strive to maintain a healthy and happy society.

For we are the HOSA's of Oklahoma. We face the future with understanding, feeling, and a dedication to improve health.

(NOTE: National HOSA will select a creed in the future.)

HOSA
UNIT V

TEST

NAME ________________________________ SCORE ____________________

1. Match terms associated with HOSA to the correct definitions. Write the correct numbers in the blanks provided.

   ______a. Student enrolled in an approved health occupations educational program; must be member of state organization in order to hold offices on the local, state, and national levels

   ______b. Person appointed by the state supervisor and approved by executive council to advise and provide leadership for the state organization

   ______c. Person(s) designated by local school administration to advise and provide leadership for the local HOSA chapter

   ______d. National organization for students enrolled in health occupations programs

   ______e. Person who may be associated with or who has participated in the development of health occupations student organizations as approved by the state organization

   ______f. Student chosen to represent the local chapter in balloting on questions of business or election of officers at state or national conferences

   ______g. Former active member who has remained in good standing with his/her chapter

   ______h. Individual who has made contributions to development of HOSA in Oklahoma and whose membership has been approved by the state executive council

   1. HOSA (Health Occupations Students of America)
   2. State HOSA advisor
   3. Local chapter advisor
   4. Voting delegate
   5. Active member
   6. Alumni member
   7. Honorary life member
   8. Professional member

2. Select from the list below benefits of HOSA membership. Mark each correct answer with an "X."

   ______a. Provides student with the opportunity to make realistic career choices

   ______b. Provides opportunity for student to be excused from other classes ______c. Helps student associate and exchange information with other students who have the same interests

______d. Helps student gain self-confidence through development of leadership skills and abilities

______e. Helps student develop responsibility through service to the local community

______f. Allows officers to have special privileges

______g. Provides guidance to student who seeks to develop knowledge, skills, and behavioral characteristics necessary in preparing for a future in a health career

______h. Assures student a better grade

______i. Introduces student to a wide variety of health career choices

3. Select from the list below the purposes of the HOSA organization. Mark each correct answer with an "X."

______a. To prepare students for participation in their professional organizations

______b. To promote the establishment of local HOSA chapters

______c. To provide opportunity to compete with other student vocational organizations

______d. To recognize individual achievement in scholarship, occupational skills, or services rendered by providing awards

______e. To promote involvement in current health care issues, environmental concerns, and survival needs of the community, the nation, and the world

______f. To promote interorganizational relationships with professional groups, businesses, industries, and other student organizations

______g. To give students a break from class routine

______h. To build the students' confidence in themselves and their work by teaching them to assume responsibilities and develop occupational competencies and social skills that lead to realistic choices of careers and successful employment in the field of health

______i. To develop self-actualization of each member which will contribute to meeting the individual's psychological, social, and economic needs

______j. To develop programs and activities which will develop physical, mental, and social well-being of the individual and produce qualities of leadership, character, good citizenship, ethical practices, and respect for the dignity of work

4. Select from the list below other student vocational organizations. Mark each correct answer with an "X."

   ______a. DECA (Distributive Education Clubs of America)

   ______b. FFA (Future Farmers of America)

   ______c. OBEA (Oklahoma Business Education Association)

   ______d. FHA-HERO (Future Homemakers of America - Home Economics Related Occupations)

   ______e. ONA (Oklahoma Nursing Association)

   ______f. VICA (Vocational Industrial Clubs of America)

   ______g. FBLA (Future Business Leaders of America)

   ______h. OHEA (Oklahoma Home Economics Association)

   ______i. AIASA (American Industrial Arts Student Association)

5. Write the HOSA motto.

   ____

   ____

6. Name the official HOSA colors.

   a. ____

   b. ____

   c. ____

7. Describe the official HOSA dress code for members.

   a. Female

      1) ____

      2) ____

      3) ____

      4) ____

   b. Male

      1) ____

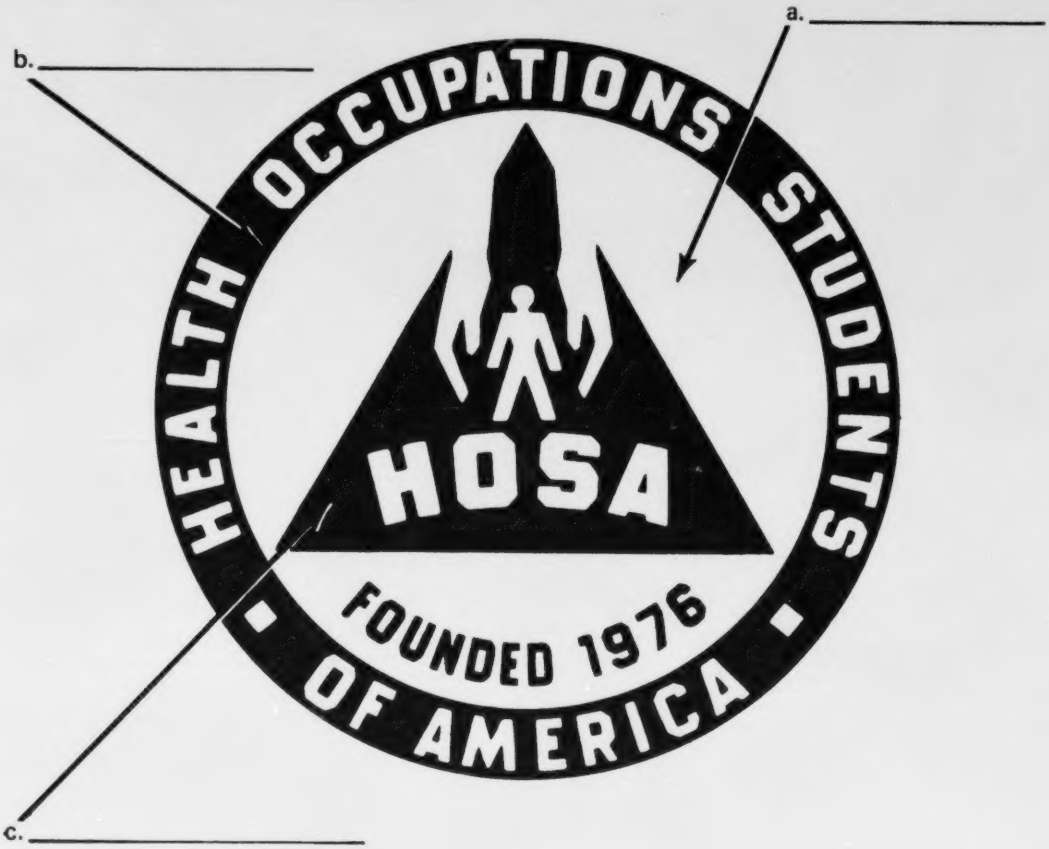
      2) ____

      3) ____

      4) ____

8. Identify the colors of the official HOSA emblem below.

Blue Maroon White


a. ______
b. ______
HEALTH OCCUPATIONS STUDENTS OF AMERICA
HOSA
FOUNDED 1976
c. ______

9. Name the organizational levels of HOSA.

a. ______

b. ______

c. ______

10. Match the chapter officers to their duties. Write the correct numbers in the blanks provided.

______a. Prepares and reads minutes of all chapter meetings; maintains membership list and record of attendance; answers all chapter correspondence promptly; counts and records all votes; reads all communications at meetings; prepares an agenda for meetings

______b. Informs all members on correct parliamentary procedures

______c. Presides over all chapter meetings; serves as ex officio member on all committee meetings; coordinates and supervises all the efforts of chapter officers and committees

______d. Gathers and assembles all materials in preparation for the chapter scrapbook

______e. Takes charge of all religious activities during chapter meetings and banquets

______f. Prepares news releases about HOSA activities for all media

______g. Assists the president; presides over chapter activities in the absence of president; serves as chairperson of program committee

______h. Keeps financial records of the chapter

______i. Sets up and secures meeting rooms; attends the door during meetings and greets visitors; makes sure meeting room is comfortable; secures the meeting without interruption

1. President
2. Vice-president
3. Secretary
4. Treasurer
5. Sentinel
6. Parliamentarian
7. Reporter
8. Historian
9. Chaplain

11. Name four essentials of a good chapter.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

12. Select from the list below criteria for selection of voting delegates. Mark each correct answer with an "X."

______a. High academic standing

_____b. Successful achievement in classroom assignments and laboratory activities while maintaining achievement in other school subjects

_____c. Active participation in all chapter meetings and assigned committees

_____d. Popular vote

13. Name types of chapter activities.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

14. Complete the chart below showing leadership training activities for HOSA.

Meetings	Activities and Participants
Spring HOSA Leadership Conference (STATE)	a. ____________ ____________ ____________ ____________
b. ____________ ____________	Each spring all members of HOSA can participate in competitive events and leadership-scholarship skills; election of national officers is held
Fall HOSA Leadership Conference (STATE)	c. ____________ ____________ ____________ ____________ ____________ ____________
d. ____________ ____________	Each summer state officers of the vocational student organizations attend a meeting that provides leadership training

15. Recite the Oklahoma Association of HOSA creed.

(NOTE: If the above activity has not been finished before the test, ask the instructor when it should be completed.)

HOSA
UNIT V

ANSWERS TO TEST

1. a. 5
   b. 2
   c. 3
   d. 1
   e. 8
   f. 4
   g. 6
   h. 7
2. a, c, d, e, g, i
3. a, b, d, e, f, h, i, j
4. a, b, d, f, g, i
5. The Hands of HOSA Mold the Health of Tomorrow
6. a. Hospital white
   b. Navy blue
   c. Maroon accent
7. Description should include:
   a. Female
      1) Navy blue blazer
      2) White or navy blue pants or skirt
      3) Maroon scarf with white HOSA imprint
      4) Plain, tailored, white shirt with winged collar
   b. Male
      1) Navy blue blazer
      2) White or navy blue pants
      3) Maroon tie with white HOSA imprint
      4) Plain, tailored, white shirt
8. a. White
   b. Maroon
   c. Blue

9. a. Local chapters
   b. State chapters
   c. National HOSA

10. a. 3 f. 7
    b. 6 g. 2
    c. 1 h. 4
    d. 8 i. 5
    e. 9

11. Any four of the following:
    a. Capable officers and leaders
    b. Responsibility for chapter activities shared by all members
    c. Challenging program of activities
    d. Proper recordkeeping
    e. Well-planned, regularly held chapter meetings
    f. Support from school officials and community leaders
    g. Active member participation in chapter activities

12. b, c

13. a. Professional activities
    b. Civic activities
    c. Service activities
    d. Social activities
    e. Fund-raising activities

14. a. All members of Oklahoma Association of HOSA can participate; all members are provided with leadership training; provides competitive events and leadership-scholarship skills
    b. National HOSA Convention
    c. All members of Oklahoma Association of HOSA can participate; local chapter officers are given leadership training; elections of secondary and full-time officers are held
    d. Vocational Leadership Institute (State)

15. Evaluated to satisfaction of instructor

PARLIAMENTARY PROCEDURE
UNIT VI

UNIT OBJECTIVE

After completion of this unit, the student should be able to conduct a meeting using the proper order of business and parliamentary procedure. This knowledge will be evidenced by completion of the assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with parliamentary procedure to the correct definitions.
2. Name the basic principles of parliamentary procedure.
3. Select from a list the characteristics of a good chairman.
4. Name the qualifications a member of a parliamentary team should have.
5. Match taps of the gavel to the correct uses.
6. Select from a list steps that make a good meeting.
7. Arrange in order the suggested order of business.
8. Describe the proper way to introduce a motion.
9. Match methods of voting to their correct uses.
10. Match parliamentary motions to their correct purposes.
11. Complete a table of motions and rules that apply to motions.
12. State two basic rules of precedence.
13. Use the proper sequence for moving a main motion.
14. Use the proper sequence for moving the previous question.

PARLIAMENTARY PROCEDURE
UNIT VI

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide student with objective sheet.

  B. Provide student with information and assignment sheets.

  C. Discuss unit and specific objectives.

  D. Discuss information and assignment sheets.

  E. Use a role play for assignment sheets and give each student an opportunity as president.

  (NOTE: Be sure each student can answer the questions in the assignment sheets.)

  F. Use a resource person to discuss the importance of a working knowledge of parliamentary procedure.

  G. Make a tape recording of your state contest to play back to your class.

  H. Obtain a copy of the State FFA Chapter meeting contest from Dr. James Key, Agriculture Education Department, Oklahoma State University, Stillwater, Oklahoma 74074.

  I. Give test.

  J. Review the test.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Assignment sheets

    1. Assignment Sheet #1--Use the Proper Sequence for Moving a Main Motion

    2. Assignment Sheet #2--Use the Proper Sequence for Moving the Previous Question

  D. Answers to assignment sheets

E. Test

F. Answers to test

III. Unit references:

A. Jones, O. Garfield. *Parliamentary Procedure at a Glance.* New York: Meredith Press, 1949.

B. Stewart, Wilbur F. *Helps in Mastering Parliamentary Procedure.* New Concord, Ohio: Co-op Printshop, 1954.

C. Jones, O. Garfield. *Senior Manual for Group Leadership.* New York: Appleton-Century-Crofts, Inc., 1949.

D. Sturgis, Alice F. *Parliamentary Procedure.* New York: McGraw-Hill Book Co., Inc., 1966.

E. Cruzan, R. M. *Practical Parliamentary Procedure.* Bloomington, Illinois: McKnight and McKnight, 1954.

F. Sutherland, S. S. *When You Preside.* Danville, Illinois: Interstate Printers and Publishers, 1959.

G. Gray, Jarrell D. and J. R. Jackson. *Leadership Training and Parliamentary Procedure for FFA.* Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1958.

H. Page, R. E. "Gus," and Maynard, Cecil D. *OSU Extension Facts, Parliamentary Procedure.* Stillwater, Oklahoma: Extension Service, Oklahoma State University, 1969.

IV. Film - "Mr. Chairman." Available from Encyclopedia Brittannica Education, 425 N. Michigan, Chicago, Illinois 60611.

(NOTE: This film is available to Oklahoma teachers on a free-loan basis from Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074. Out-of-state teachers may order from the above address.)

PARLIAMENTARY PROCEDURE
UNIT VI

INFORMATION SHEET

I. Terms and definitions

A. Parliamentary procedure--Process of arriving at group decisions in an orderly and democratic manner

B. Precedence--Rank of importance one motion has over another by the rules of parliamentary procedure

C. Main motion--Brings an item of business before the chapter in such a manner that the chapter may act upon it

Example: A member may offer a motion that the chapter hold a weiner roast

D. Subsidiary motion--Motion that modifies or disposes of the main motion

(NOTE: Subsidiary motions supersede the main motion. They must be decided on before the main motion. Listed in order of importance, they are: Lay on the Table, Previous Question, Debate, Refer to a Committee, Amend, Postpone Indefinitely.)

E. Incidental motion--Motion that arises from a pending question

Example: Point of Order, Appeal From the Decision of the Chair, Suspension of the Rules, Division of the Assembly, Close Nominations, Reopen Nominations, Parliamentary Inquiry, Leave to Withdraw a Motion

(NOTE: Incidental motions have no rank among themselves. They yield to privileged motions.)

F. Privileged motion--Motion that affects the convenience of the assembly or one of its members

Example: Adjourn, Question of Privilege

(NOTE: Privileged motions have the highest order of rank. If presented with no business before the chapter, they are main motions.)

G. Pending question--Question after it has been stated by the chair

H. Motion--Proposal for consideration and action by the chapter

(NOTE: A motion, when seconded, presents an item of business to be acted upon.)

I. Quorum--Number of members needed to be present in order for official business to be transacted

(NOTE: Unless otherwise stated in a chapter constitution, half or more of the active membership constitutes a quorum.)

INFORMATION SHEET

J. Majority--More than half of the legal votes cast

K. Two-thirds vote--2/3 of the legal votes cast

(NOTE: When a motion will limit the rights of a member or members, a 2/3 vote is required.)

L. Putting the question--Taking the vote

M. Out of order--Incorrect parliamentary procedure

N. Second--Required for many motions to make sure that at least two of the members are interested

O. Debate or discussion--Making remarks relevant to the question

II. Basic principles of parliamentary procedure

A. Right of the majority to rule

B. Right of the minority to be heard and protected

III. Characteristics of a good chairman

(NOTE: There is some use of the terms "chairperson" and "chairwoman" to recognize that many women hold positions of leadership. However, according to the National Association of Parliamentarians, the term "chairman" or "madame chairman" will continue to be used to mean the person who is in the chair. The term "madame chairman" is appropriate when a female is in the leadership position.)

A. Is impartial

B. Inspires confidence in the members

C. Provides leadership

D. Asks if there are any corrections to the minutes

E. Repeats motions and amendments exactly as they were stated before voting

IV. Qualifications a member of a parliamentary team should have

A. Desire to work

B. Ability to learn parliamentary law

(NOTE: Intense interest and desire to learn will outweigh deficiencies in ability.)

INFORMATION SHEET

- C. Strong, clear voice
- D. Calmness
- E. Self-confidence but humility

V. Correct uses of the gavel

- A. Call the meeting to order--Two taps of the gavel
- B. Signal for all members to stand--Three taps of the gavel
- C. Signal to be seated--One tap of the gavel
- D. Main motion has been passed or rejected--One tap of the gavel following the announcement
- E. Meeting is adjourned--One tap of the gavel following the announcement
- F. Maintain order during meetings--A sharp tap or a series of sharp taps of the gavel

  (NOTE: A good meeting should have dignity and order. It is the responsibility of the president to maintain complete order. Members should do their visiting outside the meeting. Talking is done only by proper recognition from the president.)

VI. Steps that make a good meeting

- A. Advanced planning and practice by the executive committee

  (NOTE: It is suggested that an agenda be prepared ahead of time.)
- B. Arranging the seating plan so everyone can see the program
- C. Proceeding according to the order of business
- D. Conducting business according to parliamentary procedure
- E. Preparing written and oral committee, secretary's and treasurer's reports
- F. Beginning and ending on time
- G. Moving along with "snap" to prevent boredom and wasted time
- H. All members expressing appreciation to guests for their attendance
- I. All members being involved in at least one committee
- J. Proceeding with minimum participation by the advisor(s)

INFORMATION SHEET

K. Helping with any clean-up duties

L. Having an official greeter to make everyone feel welcome and to prevent interruptions of serious portions of the meeting

Example: Members entering late may wait until after the devotional and flag salute to be seated

M. Giving the guest speaker some indication of the topic desired and length of the speecn

VII. Suggested order of business

(NOTE: An agenda or order for business is a list, outline, plan, or program of things to be done. A printed order of business with details about the new business, unfinished business, or reports makes a meeting run much smoother.)

A. Meeting called to order

B. Special program of a serious nature

(NOTE: This could be a program such as the opening ceremony, flag salute, creed, or devotional.)

C. Meal (if a meal function)

D. Reading minutes of previous meeting and taking roll

E. Treasurer's report

F. Committee reports

Examples: Officers, standing committees, special committees

G. Unfinished business

H. New business

I. Program

J. Announcements, introductions, correspondence, awards, or closing ceremony

(NOTE: Some of these activities may come before committee reports if desired.)

K. Adjournment

L. Refreshments and recreation

INFORMATION SHEET

VIII. Proper way to introduce a motion

A. Have only one main motion on the floor at a time

B. Receive recognition by the chair before speaking

Example: Raise hand, stand up

C. Stand and address the chair as "Mr. Chairman" or "Madame Chairman"

D. Say "I move..."

(NOTE: Do not say "I make a motion..." or "I motion...")

E. Word all motions in a positive way so that a "yes" vote means the membership is in favor of the proposed motion

IX. Methods of voting

A. Voice vote--Used most often on main motions requiring a majority vote

Example: By saying "Aye" or "No"

B. Rising vote--Needed to verify a 2/3 vote or when division of the assembly has been called for

Example: Either by standing or by a show of hands

C. Secret ballot--Used many times in officers' elections

Example: A written ballot

X. Purpose of parliamentary motions

A. Lay on the table--Temporarily delays the consideration of an item of business

(NOTE: The Motion Lay on the Table permits members to further investigate the question being considered, permits consideration of more urgent business and delays action to motion until the chapter decides to take the motion from the table. If a motion is tabled, all pending amendments and other motions adhering to it are also tabled.)

B. Previous question--Stops debate on the motion or motions before the chapter and secures a vote immediately

(NOTE: The Previous Question applies only to the question immediately pending if unqualified, and applies to successive pending questions if qualified.)

Example: A main motion and an amendment are pending, and the previous question carries; it applies only to the amendment.

INFORMATION SHEET

If the previous question is qualified to include everything before the chapter and is carried, it is necessary to vote at once on the amendment and the main motion in that order

C. Refer to committee--Allows a smaller select group to study the question and report back to the chapter its findings of a study or the accomplishment of assigned task

(NOTE: The motion Refer to Committee allows group to obtain more detailed information about the item of business, ensures privacy when considering a delicate matter, secures recommendations from a smaller group and permits a more informal consideration of a motion.)

D. Amend--Change the motion or resolution that is being considered to a more satisfactory form

(NOTE: There are two kinds of amendments - first rank and second rank. An amendment to the motion is of the first rank; an amendment to the amendment is of the second rank. Amendment to the amendment cannot be amended. A motion may be amended by adding or inserting words, striking out words, or by striking out and inserting words.)

E. Postpone indefinitely--Suppresses the question before the assembly without bringing the matter to a vote

(NOTE: If Postpone Indefinitely carries, the main motion is suppressed for the current meeting or convention. Main Motion that is postponed indefinitely can be brought up at a later meeting only by proposing it as a new motion. Sometimes Postpone Indefinitely is made by opponents of the main motion to learn who is favoring and who is opposing the main motion.)

F. Point of order--Calls attention to a violation of the rules or to a mistake in procedure

G. Appeal from the decision of the chair--Obtains a decision from the chapter to the question on which the Chairman has just rendered a decision

(Note: This permits the chapter to review the decisions of the president and is made only in regard to the decision which the president has made. An announcement of a vote or an answer to a parliamentary inquiry is not a decision.)

Examples: Appeal From the Decision of the Chair may be used if a member feels that he or she asked for the floor first but the president rendered the floor to another member. Another example is a member feels a mistake has been made by the chairman in rendering a decision relevant to a Point of Order

INFORMATION SHEET

H. Suspend the rules--Allows a chapter to take action which it is prevented from taking because of certain parliamentary rules. a previously adopted chapter program, or the standing rules of the chapter

(NOTE: Rules may be suspended only for a limited time and only for a limited purpose.)

I. Division of the assembly--Secures an accurate vote, especially when the vote has been taken by voice or show of hands

(NOTE: Any member has the right to request a division of the assembly. division of assembly automatically calls for a standing vote or ballot. It must be called for before another motion has been stated.)

J. Nomination--Presents to the chapter the name of a candidate for office

(NOTE: This may be made by a member from the floor or may be made by a nominating committee.)

K. Parliamentary inquiry--Obtains information from the presiding officer related the the pending question and proper procedure

L. Leave to withdraw a motion--Permits the proposer of a motion to remove it from consideration

(NOTE: Proposer may modify or withdraw at his or her pleasure before the motion has been stated to the chapter. Proposer may not withdraw the motion after it has been stated without the consent of the chapter. If consent is not unanimous, the chair must put the question on granting the request or a motion may be made to grant it.)

M. Adjourn--Formally closes a chapter meeting

(NOTE: It is a privileged motion when unqualified. When the motion to adjourn is qualified in any way it loses its privilege and becomes a main motion. As such, it is subject to subsidiary motions, is debatable, and may be amended.)

N. Question of privilege--Permits a member to secure immediate action upon a matter that concerns the right and comfort of the members, another individual, or himself

(NOTE: Member may request, but not demand, the granting of the privilege. This may relate to such things as ventilation, heating, conduct of officers, and the control of noise, etc.)

O. Take from the table--Permits further consideration of a tabled motion

(NOTE: In order to offer a motion to Take From the Table, some business must have been transacted since the tabling of the motion. When the motion to Take From the Table carries, the original motion is before

INFORMATION SHEET

the chapter in exactly the same situation. A tabled motion must be taken from the table at the meeting during which it was tabled or at the next regular meeting.)

P. Reconsider--Permits the chapter to reconsider the vote previously taken on a motion and to again consider the items of business

(NOTE: To move to reconsider the member must have voted on the prevailing side. Any member may second the motion. Motion must be made on the day the vote was taken or the next calendar day.)

INFORMATION SHEET

XI. Table of Motions and Rules That Apply to Motions

Motions	May Interrupt Speaker	Required Second	Debatable	Vote Required	Motion That May Apply
A. Privileged					
1. To fix time	No	Yes	Limited	Maj.	Amend, Reconsider
2. To adjourn	No	Yes	No	Maj.	None
3. To take a recess	No	Yes	Limited	Maj.	Amend
4. Question of privilege	Yes	No	No	Chmn. rules	All
5. Call for order of day	Yes	No	No	None	None
B. Incidental					
1. Point or order	Yes	No	No or Maj.	Chmn. rules	None
2. Appeal	Yes	Yes	Yes	Maj.	All except amend
3. Suspend rules	No	Yes	No	2/3	None
4. Withdraw a motion	No	No	No	Maj.	Reconsider
5. Parliamentary inquiry	Yes	No	No or maj.	Chmn. rules	None
6. Object to consider	Yes	No	No	2/3	All
7. Call for division of the house	Yes	No	No	Maj.	All
8. To call for a division of a question	No	Yes	No	Maj.	All
C. Subsidiary					
1. Lay on table	No	Yes	No	Maj.	None
2. Previous question	No	Yes	No	2/3	Reconsider
3. Refer to committee	No	Yes	Yes	Maj.	Amend, Recon., Prev. Ques.
4. Amend	No	Yes	Yes	Maj.	Amend, Recon., Prev. Ques.
5. Postpone indefinitely	No	Yes	Yes	Maj.	Limit Deb., Prev. Ques., Recon.

INFORMATION SHEET

XI. Table of Motions and Rules That Apply to Motions - Continued

Motions	May Interrupt Speaker	Required Second	Debatable	Vote Required	Motion That May Apply
D. Main Motions					
1. General main motion	No	Yes	Yes	Maj.	All
2. Specific main motion					
a. To take from table	No	Yes	No	Maj.	None
b. To reconsider	Yes	Yes	Yes	Maj.	Limit Deb., Prev. Ques., Table
c. To adopt a resolution	No	Yes	Yes	Maj.	All
d. To adjourn	No	Yes	Limited	Maj.	Amend, Reconsider
e. To create order of day	No	Yes	Yes	Gen. Maj. Spec. 2/3	All
f. To amend	No	Yes	Yes	Maj.	Amend, Recon., Prev. Ques., Limited Deb.

INFORMATION SHEET

XII. Two basic rules of precedence

A. Motion of higher precedence may be proposed when a motion is pending

(NOTE: A motion of lower precedence may not be proposed.)

B. Motions are considered and voted upon in reverse order to their proposal

PARLIAMENTARY PROCEDURE
UNIT VI

ASSIGNMENT SHEET #1--USE THE PROPER SEQUENCE FOR MOVING A MAIN MOTION

NAME______________________________ SCORE__________

Members should be assigned to role play the following sequence. During the assignment sheet each member should have the opportunity to serve as Chairman. This allows each member to receive and dispose of an item of business in the form of a main motion.

Chairman: Is there any other business to be presented at this time?

Member 1: (rises) Mr. President,

Chairman: Member 1.

Member 1: I move that...

Member 2: (rises) Mr. President, I second the motion.

Chairman: The motion before the chapter is... This motion can be debated and amended. It requires a majority vote. It is now open for discussion. (discussion)

Chairman: Are you ready for the question? Those supporting the motion that... say "Aye." Those opposing, say "no." The "Aye's/No's" have it and the motion is carried/lost.

(NOTE: Rap gavel once.)

QUESTIONS

As Chairman, what would you do if:

1. A member introduced the motion by stating, "I make a motion..."

____

____

____

2. A member rose, addressed the chair, and made a motion before you recognized him or her? ______________________________

____

____

____

ASSIGNMENT SHEET #1

3. A motion was properly made but received no second? ______________________

____

____

____

4. You wished to find out whether members were ready to vote on the pending question?____

____

____

____

5. You had just completed counting the votes and a member, after obtaining the floor, began discussing the motion just voted on? ______________________________

____

____

____

6. A member began debating a motion before you had stated the motion was open for discussion? ____

____

____

____

PARLIAMENTARY PROCEDURE
UNIT VI

ASSIGNMENT SHEET #2--USE THE PROPER SEQUENCE FOR MOVING THE PREVIOUS QUESTION

NAME________________________________ SCORE____________

Members should be assigned to role play the following sequence. During the assignment sheet each member should have the opportunity to serve as Chairman. This will allow each member to receive and dispose of the previous question. For the purpose of practice, ask that an item of business be presented in the form of a main motion. During the discussion of this motion a member may obtain the floor and state:

Member 1:	(rises) Madame Chairman, I move the previous question.
Member 2:	(rises) Madame Chairman, I second the motion.
Chairman:	The previous question is called for. This motion cannot be amended or debated and requires a two-thirds vote. Mr./Madame Secretary will you assist me in counting? Those supporting the motion please rise. (pause to count) Be seated. Those opposing the motion please rise. (pause to count) Be seated. Mr./Madame Secretary, what was the vote?
Secretary:	The vote is affirmative, eight; negative, four.
Chairman:	There being a two-thirds in the affirmative, the motion is carried (Rap gavel once.) Therefore, we will vote immediately on the main motion. (NOTE: If a main motion and an amendment are before the chapter, the previous question may be moved on all pending questions.)

QUESTIONS

1. What is the purpose of calling for the previous question? ____________________

____

____

____

2. Does the previous question, if stated without qualifications, apply only to the pending question or to all questions before the chapter? ____________________

____

____

____

ASSIGNMENT SHEET #2

As presiding officer, what would you do if:

3. The vote on the previous question was a majority vote but not a two-thirds vote?

4. A member offered an amendment to the previous question?

5. No second was offered to the previous question?

PARLIAMENTARY PROCEDURE
UNIT VI

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

1. The Chairman would call the member out of order and ask the member to restate the motion.
2. The Chairman would call the member out of order and inform the member to receive recognition before addressing the chair.
3. The Chairman would call for a second then if no member seconded the motion the Chairman would state "The motion is not before the assembly due to lack of a second." Rap the gavel once.
4. The Chairman would state "Are you ready for the question?" If the Chairman receives no further debate after asking three times, then the assembly may proceed to vote on the pending question.
5. The Chairman would call the member out of order and inform the member that there is no motion before the chapter.
6. The Chairman would call the member out of order since the motion is not open for discussion.

Assignment Sheet #2

1. Stops debate on the motion or motions before the chapter and secures a vote immediately.
2. The previous question applies only to the pending question unless stated to apply to all pending questions.
3. The previous question fails for a lack of a two-thirds vote.
4. The member is out of order because the previous question is not amendable.
5. The previous question fails for a lack of a second motion.

PARLIAMENTARY PROCEDURE
UNIT VI

TEST

NAME ______________________________ SCORE ____________

1. Match terms associated with parliamentary procedure to the correct definitions. Place the correct numbers in the blanks provided.

_____a. Incorrect parliamentary procedure

_____b. Making remarks relevant to the question

_____c. Required for many motions to make sure that at least two of the members are interested

_____d. Question after it has been stated by the chair

_____e. Motion that affects the convenience of the assembly or one of its members

_____f. Taking the vote

_____g. More than half of the legal votes cast

_____h. 2/3 of the legal votes cast

_____i. Number of members needed to be present in order for official business to be transacted

_____j. Proposal for consideration and action by the chapter

_____k. Process of arriving at group decisions in an orderly and democratic manner

_____l. Brings an item of business before the chapter in such a manner that the chapter may act upon it

_____m. Motion that arises from a pending question

_____n. Rank of importance one motion has over another by the rules of parliamentary procedure

_____o. Motion that modifies or disposes of the main motion

1. Parliamentary procedure
2. Precedence
3. Main motion
4. Subsidiary motions
5. Incidental motion
6. Privileged motion
7. Pending question
8. Motion
9. Majority
10. Two-thirds vote
11. Putting the question
12. Out of order
13. Second
14. Debate or discussion
15. Quorum

2. Name the two basic principles of parliamentary procedure.

   a. ______________________________

   b. ______________________________

3. Select from the list below the characteristics of a good chairman. Mark each correct answer with an "X."

   ______a. Is impartial

   ______b. Speaks their opinion

   ______c. Provides leadership

   ______d. Asks if there are any corrections to the motions

   ______e. Repeats motions and amendments exactly as they were stated before voting

   ______f. Inspires confidence in the members

   ______g. Asks if there are any corrections to the minutes

4. Name the qualifications a member of a parliamentary team should have.

   a. ______________________________

   b. ______________________________

   c. ______________________________

   d. ______________________________

   e. ______________________________

5. Match taps of the gavel to the correct uses. Write the correct numbers in the blanks provided. An answer may be used more than once.

   ______a. Call the meeting to order

   ______b. Signal for all members to stand up

   ______c. Signal to be seated

   ______d. Main motion has been passed or rejected

   ______e. Meeting is adjourned

   ______f. Maintain order during meetings

   1. Two taps of the gavel
   2. Three taps of the gavel
   3. One tap of the gavel following the announcement
   4. A sharp tap or a series of sharp taps of the gavel
   5. One tap of the gavel

6. Select from the list below steps that make a good meeting. Place an "X" by the correct answers.

______a. Beginning and ending on time

______b. Moving along with "snap" to prevent boredom and wasted time

______c. Having advisor be in charge and carry on meeting

______d. Dispensing with all committee reports

______e. Conducting business according to parliamentary procedure

______f. Conducting business according to chairman's rules

______g. All members expressing appreciation to guests for their attendance

______h. Arranging the seating plan so everyone can see the program

______i. Advanced planning and practice by chapter advisor

______j. Advanced planning and practice by the executive committee

______k. Preparing written and oral committee, secretary's, and treasurer's reports

______l. Proceeding according to the order of business

______m. Giving the guest speaker some indication of the topic desired and length of the speech

______n. Helping with any clean-up duites

______o. Having an official greeter to make everyone feel welcome and to prevent interruptions of serious portions of the meeting

______p. All members being involved in at least one committee

______q. Inviting all members who usually attend meetings

______r. All business should be brought up by the executive committee

______s. Proceeding with minimum participation by the advisor(s)

7. Arrange in the suggested order of business. Place a "1" by the first step, a "2" by the second step and so on.

______a. Program

______b. Committee reports

______c. New business

______d. Refreshments and recreation

______e. Meeting called to order

______f. Meal (if a meal function)

______g. Adjournment

______h. Special program of a serious nature

______i. Treasurer's report

______j. Unfinished business

______k. Announcements, introductions, correspondence, awards, or closing ceremony

______l. Reading minutes of previous meeting and taking roll

8. Describe the proper way to introduce a motion.

____

____

____

9. Match methods of voting with their correct uses. Write the correct numbers in the blanks provided.

______a. Used most often on main motions requiring a majority vote

______b. Used many times in officers' elections

______c. Needed to verify a 2/3 vote when division of the assembly has been called for

1. Rising vote
2. Secret ballot
3. Voice vote

10. Match parliamentary motions to their correct purposes. Write the correct numbers in the blanks provided.

______a. Allows a smaller select group to study the question and report back to the chapter its findings of a study or the accomplishment of assigned task

______b. Stops debate on the motion or motions before the chapter and secures a vote immediately

______c. Temporarily delays the consideration of an item of business

______d. Suppresses the question before the assembly without bringing the matter to a vote

1. Lay on the table
2. Previous question
3. Refer to committee
4. Postpone indefinitely

______e. Change the motion or resolution that is being considered to a more satisfactory form

______f. Allows a chapter to take action which it is prevented from taking because of certain parliamentary rules, a previously adopted chapter program, or the standing rules of the chapter

______g. Obtains a decision from the chapter to the question on which the Chairman has just rendered a decision

______h. Calls attention to a violation of the rules or to a mistake in procedure

______i. Permits the proposer of a motion to remove it from consideration

______j. Obtains information from the presiding officer related to the pending question and proper procedure

______k. Presents to the chapter the name of a candidate for office

______l. Secures an accurate vote, especially when the vote has been taken by voice or by show of hands

______m. Permits further consideration of a tabled motion

______n. Permits a member to secure immediate action upon a matter that concerns the right and comfort of the members, another individual, or himself

______o. Formally closes a chapter meeting

______p. Permits the chapter to reconsider the vote previously taken on a motion and to again consider the items of business

5. Amend
6. Point of order
7. Appeal from the decision of the chair
8. Suspend the rules
9. Division of the assembly
10. Nomination
11. Parliamentary inquiry
12. Leave to withdraw a motion
13. Adjourn
14. Question of privilege
15. Take from the table
16. Reconsider

11. Complete a table of motions and rules that apply to motions. Write the correct answers in the blanks provided.

Motions	May Interrupt Speaker	Required Second	Debatable	Vote Required	Motion That May Apply
A. Privileged					
1. To fix time	No	______a.	Limited	Maj.	Amend, Reconsider
2. To adjourn	No	Yes	No	______b.	None
3. To take a recess	No	______c.	Limited	Maj.	Amend
4. Question of privilege	______d.	No	No	Chmn. rules	All
5. Call for order of day	Yes	No	No	______e.	None
B. Incidental					
1. Point of order	Yes	______f.	No or Maj.	Chmn. rules	None
2. Appeal	Yes	Yes	Yes	______g.	All except amend
3. Suspend rules	No	Yes	No	______h.	None
4. Withdraw a motion	No	______i.	No	Maj.	Reconsider
5. Parliamentary inquiry	Yes	______j.	No or Maj.	Chmn. rules	None
6. Object to consider	Yes	No	No	______k.	All
7. Call for division of the house	Yes	______l.	No	Maj.	All
8. To call for a division of a question	No	Yes	No	______m.	All
C. Subsidiary					
1. Lay on table	No	Yes	______n.	Maj.	None
2. Previous question	No	Yes	No	______o.	Reconsider
3. Refer to committee	No	______p.	Yes	Maj.	Amend, Recon., Prev. Ques.
4. Amend	No	Yes	Yes	Maj.	Amend, Recon., Prev. Ques.
5. Postpone indefinitely	No	Yes	Yes	Maj.	Limit Deb., Prev. Ques., Recon.

Motions	May Interrupt Speaker	Required Second	Debatable	Vote Required	Motion That May Apply
D. Main Motions					
1. General main motion	No	Yes	Yes	Maj.	All
2. Specific main motion					
a. To take from table	No	Yes	______q.	Maj.	None
b. To reconsider	Yes	Yes	Yes	Maj.	Limit Deb., Prev. Ques., Table
c. To adopt a resolution	No	Yes	Yes	Maj.	All
d. To adjourn	No	Yes	Limited	Maj.	Amend, Reconsider
e. To create order of day	No	Yes	Yes	Gen. Maj. Spec. 2/3	All
f. To amend	No	Yes	Yes	Maj.	Amend, Recon., Prev. Ques., Limited Deb.

12. State two basic rules of precedence.

    a. ______________________________

    b. ______________________________

13. Use the proper sequence for moving a main motion.

14. Use the proper sequence for moving the previous question.

    (NOTE: If activities 13 and 14 have not been finished before the test, ask the instructor when they should be completed.)

PARLIAMENTARY PROCEDURE
UNIT VI

ANSWERS TO TEST

1. a. 12
   b. 14
   c. 13
   d. 7
   e. 6
   f. 11
   g. 9
   h. 10
   i. 15
   j. 8
   k. 1
   l. 3
   m. 5
   n. 2
   o. 4

2. a. Right of the majority to rule
   b. Right of the minority to be heard and protected

3. a, c, e, f, g

4. a. Desire to work
   b. Ability to learn parliamentary law
   c. Strong, clear voice
   d. Calmness
   e. Self-confidence but humility

5. a. 1
   b. 2
   c. 5
   d. 3
   e. 3
   f. 4

6. a, b, e, g, h, j, k, l, m, n, o, p, s

7. a. 9
   b. 6
   c. 8
   d. 12
   e. 1
   f. 3
   g. 11
   h. 2
   i. 5
   j. 7
   k. 10
   l. 4

8. a. Have only one main motion on the floor at a time
b. Receive recognition by the chair before speaking
c. Stand and address the chair "Mr. Chairman" or "Madame Chairman"
d. Say "I move..."
e. Word all the motions in a positive way so that a "yes" vote means the membership is in favor of the proposed motion

9. a. 3
b. 2
c. 1

10. a. 3
b. 2
c. 1
d. 4
e. 5
f. 8
g. 7
h. 6
i. 12
j. 11
k. 10
l. 9
m. 15
n. 14
o. 13
p. 16

11. a. Yes
b. Maj.
c. Yes
d. Yes
e. None
f. No
g. Maj.
h. 2/3
i. No
j. No
k. 2/3
l. No
m. Maj.
n. No
o. Yes
p. 2/3
q. No

12. a. Motion of higher precedence may be proposed when a motion is pending
b. Motions are considered and voted upon in reverse order to their proposal

13. Evaluated to satisfaction of instructor

14. Evaluated to satisfaction of instructor

NUTRITION AS APPLIED TO DENTISTRY AND DIGESTION
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to list the purposes of good nutrition and match digestive parts to their functions. The student should also be able to evaluate personal food habits and prepare a lingual vitamin C test. This knowledge will be evidenced by completion of the assignment and job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with applied nutrition to the correct definitions.
2. Select from a list classification of nutrients.
3. List functions of food.
4. List purposes of good nutrition.
5. Select from a list primary causes of nutritional deficiencies.
6. Match the adult daily requirements to the correct basic four food groups.
7. Describe the importance of breakfast.
8. Select from a list sources of carbohydrates.
9. List types of fats.
10. Distinguish between functions of fats and carbohydrates.
11. Distinguish between complete proteins and incomplete proteins.
12. Select from a list functions of proteins.
13. Complete a chart on minerals, their sources and their functions.
14. Match vitamins to their functions.
15. Match vitamins to their sources.
16. Discuss functions of water in the diet.
17. List foods which encourage growth of lactobacillus count in the mouth.
18. Label the parts of the digestive system.

19. Match parts of digestive system to their functions.
20. Evaluate personal food habits.
21. Demonstrate the ability to prepare a lingual vitamin C test.

NUTRITION AS APPLIED TO DENTISTRY AND DIGESTION
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide student with objective sheet.

  B. Provide student with information and assignment sheets.

  C. Order film.

  D. Make transparencies.

  E. Discuss unit and specific objectives.

  F. Discuss information and assignment sheets.

  G. Display posters about nutrition.

  H. Have students prepare menu using the basic four food groups.

  I. Lead a discussion about malnutrition and vitamin deficiencies.

  Examples: Angler's corners, spongy gingiva, lips and tongue color

  J. Provide student with equipment needed to complete job sheets.

  K. Use a basic four food chart to make a plan to treat a nutrition problem.

  Examples: Hurried breakfast, too many snacks, dislike for certain foods such as green vegetables

  L. Invite representatives from the following groups to the classroom to speak and do a demonstration on nutrition and exercise.

  Examples: Exercising groups, Weight Watchers, aerobics instructors

  (NOTE: You may want to encourage the overweight students to join for self-improvement and better job placement.)

  M. Make posters about sugar content of foods.

  N. Give test.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

C. Transparency masters:

   1. TM 1--Basic Four Food Groups

   2. TM 2--Vitamins A and C

   3. TM 3--Digestive Process

D. Assignment Sheet #1--Evaluate Personal Food Habits

E. Job Sheet #1--Prepare a Lingual Vitamin C Test

F. Test

G. Answers to test

III. Unit references:

A. Howe, Phyllis S. *Basic Nutrition in Health and Disease.* Philadelphia, Pennsylvania: W. B. Saunders Co., 1971.

B. Townsend, Carolyn E. *Nutrition and Diet Modification for the Nurse.* Albany, New York: Delmar Publishers, 1972.

C. *Dental Assistant's Training Guide.* Oklahoma City, Oklahoma: Dental Health Service, Oklahoma State Department of Health.

D. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia, Pennsylvania: W. B. Saunders Co., 1976.

IV. Additional reference: *Foods and Your Health*. Milliken Publishing Co., 1100 Research Blvd., St. Louis, Missouri 63132.

(NOTE: This is a book of nutritional color pictures to be made into transparencies.)

V. Filmstrips:

(NOTE: Oklahoma teachers may order the following filmstrips on a free-loan basis from the State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1515 West Sixth, Stillwater, OK 74074. All out-of-state teachers must order the films from the addresses listed.)

A. "Food to Live On: Nutrition from the Twenties Through the Nineties." Available from Tupperware Home Parties, Educational Service Department 78, P.O. Box 2353, Orlando, Florida 32802.

B. "Food for Life: The Basic Four." Available from Tupperware Home Parties, Educational Service Department 78, P.O. Box 2353, Orlando, Florida 32802.

(NOTE: This filmstrip has color transparencies, activities, and scripts.)

C. "Planning to Eat: A Guide to Saving Time, Money, and Energy." Available from Tupperware Home Parties, Educational Service Department 78, P.O. Box 2353, Orlando, Florida 32802.

(NOTE: This filmstrip has duplicating masters and student activities.)

VI. Films:

(NOTE: These films are also available from Alfred Higgins Production, Inc., 9100 Sunset Blvd., Los Angeles, California 90069.)

A. "The Human Body: Digestive System." Available from Oklahoma State Department of Health, 3400 North Eastern, Oklahoma City, Oklahoma 73105.

B. "Vitamins: What Do They Do?" Available from Oklahoma State Department of Health.

(NOTE: This film covers vitamin deficiencies and motivations to eat a balanced diet.)

NUTRITION AS APPLIED TO DENTISTRY AND DIGESTION
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Nutrition--Study of food and its relation to health

B. Nutrients--Chemical compounds found in food necessary for good health

C. Diet--Foods which are eaten to satisfy an appetite

D. Metabolism--Building up and breaking down process by which substances can be utilized by the body

E. Anorexia--Lack or loss of appetite for food

F. Achlorhydria--Absence of free hydrochloric acid in the stomach

G. Assimilation--Process of absorbing food by the digestive organs and turning it into living tissue

H. Etiology--Science related to the causes of disease

I. Oxidation--Combination with oxygen

J. Fatty acid--Organic compound of carbon, hydrogen, and oxygen, which combines with glycerol to make a fat

K. Amino acids--Chemical compounds which are components of proteins

L. Carbohydrates--Chemical compounds of carbon, hydrogen, and oxygen; sugars and starches

M. Proteins--Complex organic compounds containing carbon, hydrogen, nitrogen, phosphorus, iodine, copper, usually sulfur, and sometimes iron

N. Fats--Combination of fatty acid and glycerol, containing the elements carbon, hydrogen, and oxygen

(NOTE: Fats contain the same elements as carbohydrates but in different proportions.)

O. Malnutrition--Lack of necessary food substances in the body

P. Incision--Biting and tearing food into pieces which can be chewed

Q. Mastication--Grinding of food

(NOTE: This is accomplished by the premolars and molars.)

R. Insalivation--Mixing of saliva with food during chewing

INFORMATION SHEET

S. Taste--Enhances pleasure of food and stimulates digestion

T. Deglutition--Swallowing of food

II. Classifications of nutrients

A. Carbohydrates

B. Fats

C. Proteins

D. Minerals

E. Water

F. Vitamins

G. Cellulose or roughage

III. Functions of food

A. Provides energy

B. Regulates body processes

C. Promotes growth

IV. Purposes of good nutrition

A. Produces strong bones, muscles, and supportive tissue

B. Provides greater personal energy and vitality

C. Helps body resist illness

D. Speeds healing

E. Aids in maintaining good oral health

V. Primary causes of nutritional deficiencies

A. Poor food habits

Example: Diet not chosen from basic four food groups

B. Consumption of nutrient-deficient foods

Examples: Colas, snacks, sweets

(NOTE: A cola contains the equivalent of seven teaspoons of sugar.)

INFORMATION SHEET

C. Anorexia due to disease

D. Drugs

E. Alcoholism

(NOTE: It may depress the appetite.)

F. Lack of proper food

VI. Basic four food groups and adult daily requirements (Transparency 1, Assignment Sheet #1)

A. Milk group--Two servings

B. Meat group--Two or more servings

C. Fruit and vegetable group--Four or more servings

D. Bread and cereal group--Four or more servings

(NOTE: The main part of the diet should be selected from the basic four food groups; other foods may be added to make meals more appealing and satisfying.)

VII. Importance of breakfast

(NOTE: A good breakfast helps decrease the desire to eat snack foods.)

A. Increases attention span

B. Maintains performance level

C. Produces energy for the day

D. Lessens the problem of obesity

VIII. Sources of carbohydrates

A. Sugar and sugar products

Examples: Honey, corn syrup, and candy

B. Grains and grain products

Examples: Bread, cereal, and pasta

C. Fruits

Examples: Apples, bananas, and pears

D. Milk and dairy products

INFORMATION SHEET

IX. Types of fats

A. Saturated

Examples: Cream, cheese, meat, and eggs

B. Unsaturated

Examples: Olives, nuts, corn, soybean, and their oils

(NOTE: Mineral oil prevents the absorption of vitamins A and D.)

X. Functions of fats and carbohydrates

A. Fats

1. Carry and facilitate absorption of fat-soluble vitamins
2. Insulate body and pad some vital organs
3. Aid growth and maintenance

B. Carbohydrates

1. Provide heat and energy
2. Facilitate normal oxidation of fat
3. Minimize oxidation of protein for energy purposes
4. Provide glucose

   (NOTE: Glucose is the only source of energy for nerve tissue.)

5. Provide lactose

   (NOTE: Lactose enhances absorption of calcium.)

XI. Kinds of proteins

A. Complete proteins--Contain all essential amino acids

(NOTE: Animals are the source of complete proteins, such as meat, milk, fish, and eggs.)

B. Incomplete proteins--Do not contain all essential amino acids

(NOTE: Plants are the source of incomplete proteins, such as dried beans, peas, and nuts.)

INFORMATION SHEET

XII. Functions of proteins

A. Build and repair cells and tissues

B. Provide heat and energy

C. Help maintain water balance

D. Help manufacture chemicals

(NOTE: Proteins help manufacture chemicals such as hormones, enzymes, antibodies, and other blood proteins, but they are not stored in the body as such.)

XIII. Minerals, sources, and functions

MINERAL	SOURCE	FUNCTION
CALCIUM (NOTE: Calcium is important for good health at all stages of life.)	Milk and milk products; seafood; leafy green vegetables; oranges and figs	Formation of bone tissue; Regulation of muscle contractions and heartbeat; Proper absorption of iron
PHOSPHORUS (NOTE: Phosphorous is an important element of every living cell.)	Whole grain cereals; meats; milk and milk products	Maintain normal acid-base balance (NOTE: Ninety percent of phosphorous is found in teeth.)
IRON (NOTE: Iron carries oxygen to tissues.)	Liver or kidney; enriched cereal; leafy green vegetables; dried beans and peas	Manufacture of new blood cells
SODIUM AND POTASSIUM (NOTE: Most foods contain some sodium and potassium.)	Baking powder and baking soda; table salt; orange juice	Maintain normal water balance; regulation of muscle irritability; maintenance of normal acid-base balance
IODINE	Seafood, iodized table salt	Formation of thyroid hormone that controls metabolic rate
Fluorine	Fluoridated drinking water (NOTE: Fluorine also occurs naturally in some springs and wells.)	Increases resistance to dental caries

INFORMATION SHEET

XIV. Functions of vitamins

A. Vitamin A (Transparency 2)

1. Essential to growth
2. Contributes to health of tissues
3. Necessary for vision
4. Prevents certain eye diseases

B. Vitamin D

1. Aids utilization of calcium and phosphorus
2. Aids balance between calcium and phosphorus

C. Vitamin E

1. Prevents destruction of vitamin A
2. Can unite with oxygen to protect red blood cells

D. Vitamin K

1. Essential for normal blood clotting
2. Aids normal functioning of the liver

(NOTE: Fat-soluble vitamins A, D, E, and K are stored in the body and are destroyed by rancidity but are not destroyed by ordinary cooking.)

E. Vitamin C (Transparency 2)

(NOTE: During stress, disease, or increased physical exercise a marked increase of vitamin C is needed daily.)

1. Aids in healing wounds
2. Maintains health of the dentin, cartilage, and matrix of bone
3. Repairs and forms bone structure
4. Aids proper absorption of iron

F. Vitamin B_1 (Thiamine)

1. Metabolizes carbohydrates
2. Keeps nerves healthy
3. Helps maintain good appetite and muscle tone

INFORMATION SHEET

G. Vitamin B_2 (Riboflavin)

  1. Aids oxidation process of living cell
  2. Aids conversion of other B complex vitamins
  3. Combines with protein to form a number of important enzymes

H. Vitamin B_3 (Niacin)

  1. Aids cellular respiration
  2. Aids oxidation of glucose

  (NOTE: Water-soluble vitamins C, B_1, B_2, B_3, and B_{12} have little or no storage in the body and may be lost by contact with heat and water.)

I. Vitamin B_{12}

  1. Aids regeneration of blood
  2. Used in treatment of pernicious anemia

XV. Sources of vitamins

A. Vitamin A

  1. Liver of all types
  2. Milk products and eggs
  3. Leafy green vegetables

B. Vitamin D

  1. Fortified milk
  2. Sunshine
  3. Fish liver oils

C. Vitamin E

  1. Leafy green vegetables
  2. Vegetable oils

D. Vitamin K

  1. Leafy green vegetables
  2. Cauliflower, cabbage

INFORMATION SHEET

- E. Vitamin C
  1. Citrus fruits
  2. Leafy green vegetables

     Examples: Mustard greens and turnip greens
  3. Melons
- F. Vitamin B_1 (Thiamine)
  1. Organ meats
     - a. Liver
     - b. Heart
  2. Whole grain cereals
- G. Vitamin B_2 (Riboflavin)
  1. Whole grain cereals
  2. Leafy green vegetables
  3. Milk, eggs, liver
- H. Vitamin B_3 (Niacin)
  1. Meats
  2. Fish and poultry
  3. Whole grain cereals
- I. Vitamin B_{12}
  1. Liver and kidney
  2. Meat and fish
  3. Eggs and milk

XVI. Functions of water in the diet

- A. Acts as solvent for all products of digestion
- B. Carries nutrients to the cells

INFORMATION SHEET

C. Aids regulation of body temperature

D. Excretes waste products through the kidneys

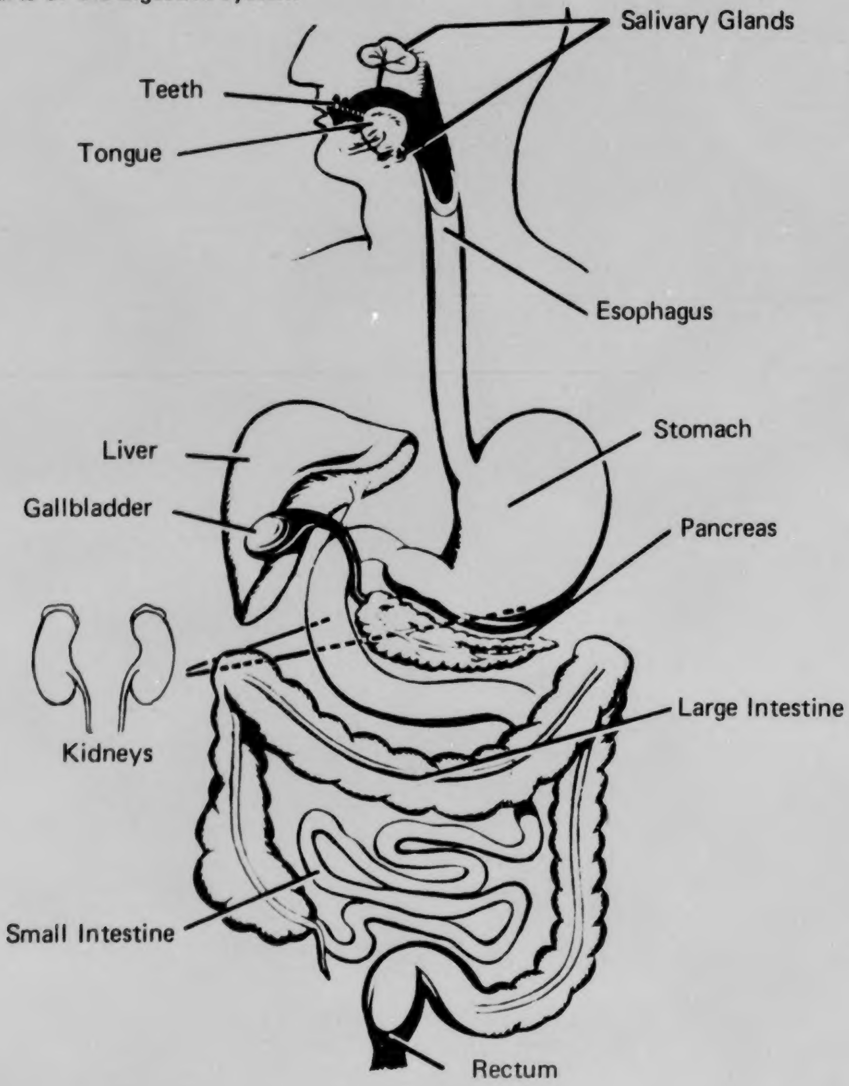
(NOTE: Six to eight glasses of water are recommended daily.)

XVII. Foods which encourage growth of lactobacillus count in the mouth

A. Carbohydrates

B. Starches

XVIII. Parts of the digestive system


Salivary Glands
Teeth
Tongue
Esophagus
Liver
Stomach
Gallbladder
Pancreas
Kidneys
Large Intestine
Small Intestine
Rectum

INFORMATION SHEET

XIX. Parts of the digestive system and their functions (Transparency 3)

A. Teeth--Reduce the size of food particles by mastication

B. Tongue--Moves food, sense of taste

C. Salivary glands--Secrete enzymes which begin to convert starch to sugar

(NOTE: This takes place in the mouth.)

D. Esophagus--Conveys food to the stomach

E. Stomach--Adds acid for protein reduction

F. Liver--Stores fat-soluble vitamins, metabolizes fats, removes toxins and worn-out cells

G. Gallbladder--Stores and concentrates bile until needed for digestion

H. Pancreas--Secretes further digestive proteins and carbohydrates

I. Small intestine--Where digested food is absorbed into bloodstream

(NOTE: Approximately ninety percent of food is absorbed through the villa in the small intestine.)

J. Large intestine--Concentrates wastes by removing water

(NOTE: Water, minerals and vitamins are absorbed in the large intestine.)

K. Kidneys--Excrete water and salts

(NOTE: The kidneys are located on either side of the spinal column and lie behind the abdominal organs.)

L. Rectum--Controls elimination of solid wastes

Basic Four Food Groups

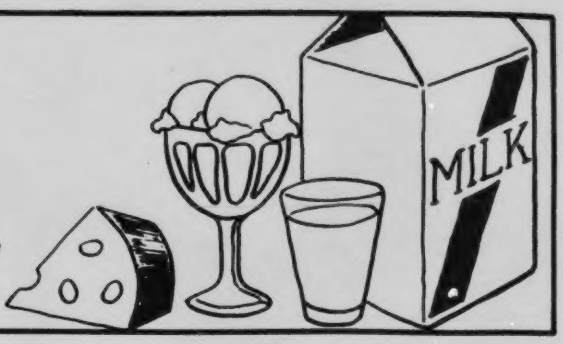
MILK GROUP

3 or more glasses milk—Children

4 or more glasses—Teen-agers

2 or more glasses—Adults

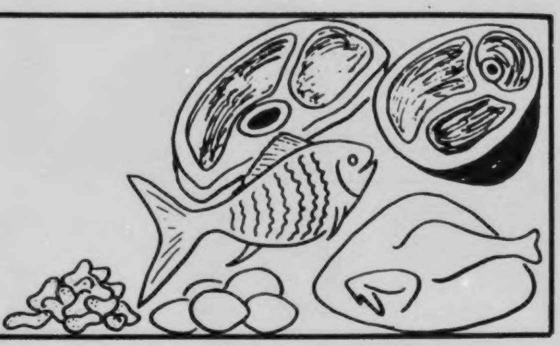
Cheese, ice cream and other milk-made foods can supply part of the milk



MEAT GROUP

2 or more servings daily

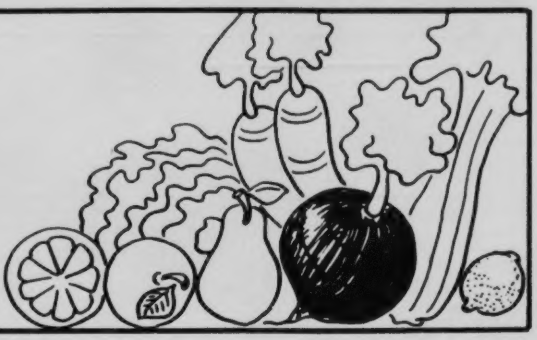
Meat, fish, poultry, eggs
with dry beans, peas, and nuts as alternates



VEGETABLES AND FRUITS

4 or more servings daily

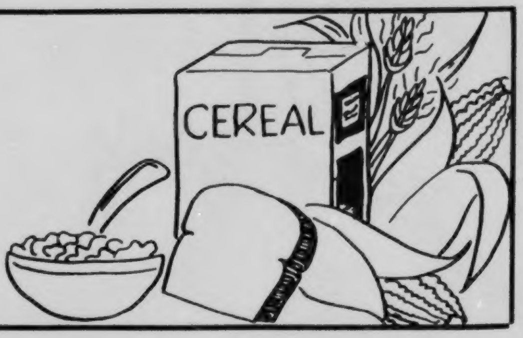
include dark green or yellow vegetables; citrus fruit or tomatoes



BREAD AND CEREALS

4 or more servings daily

Enriched or whole grain.
Added milk improves nutritional value



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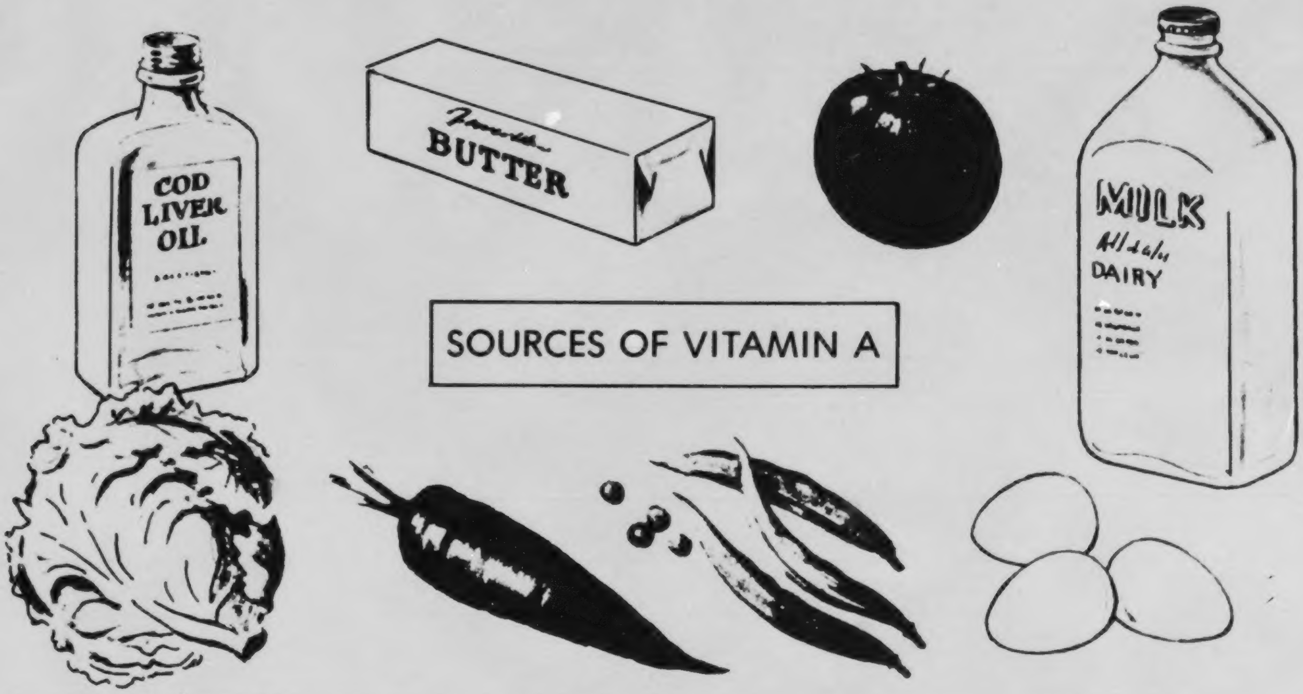
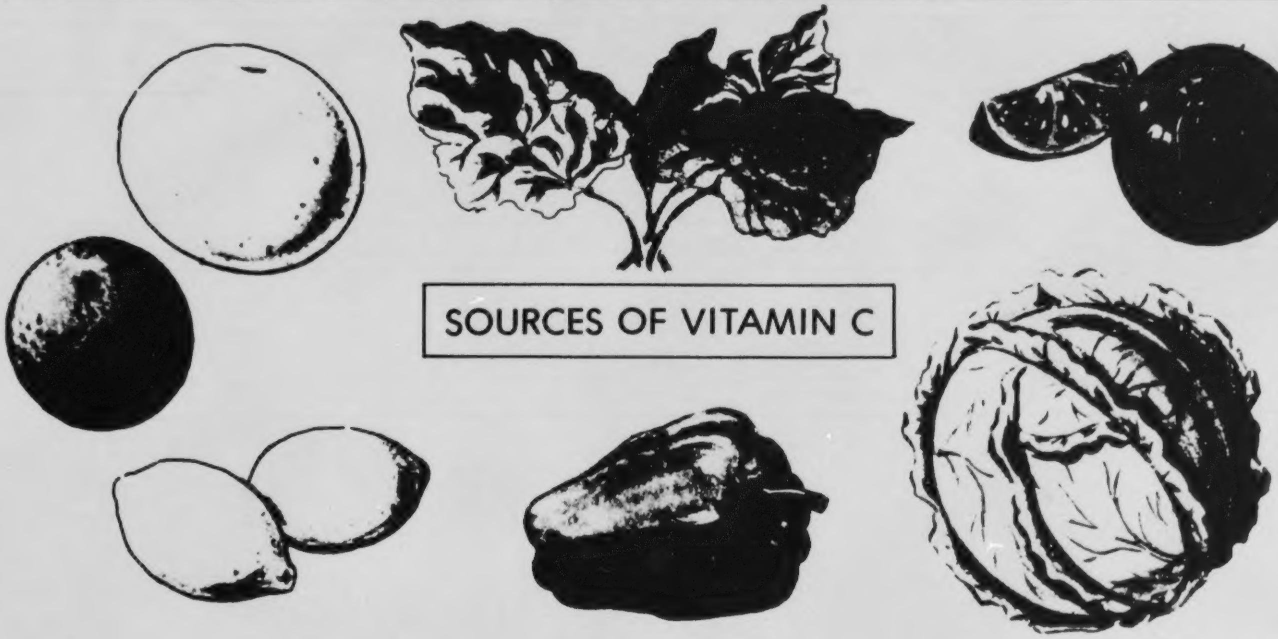
VITAMINS A AND C



SOURCES OF VITAMIN A

Vitamin A helps our body to grow and to resist infections and colds, prevents eye disease.



SOURCES OF VITAMIN C

Vitamin C helps our body develop strong bones, teeth, and gums.

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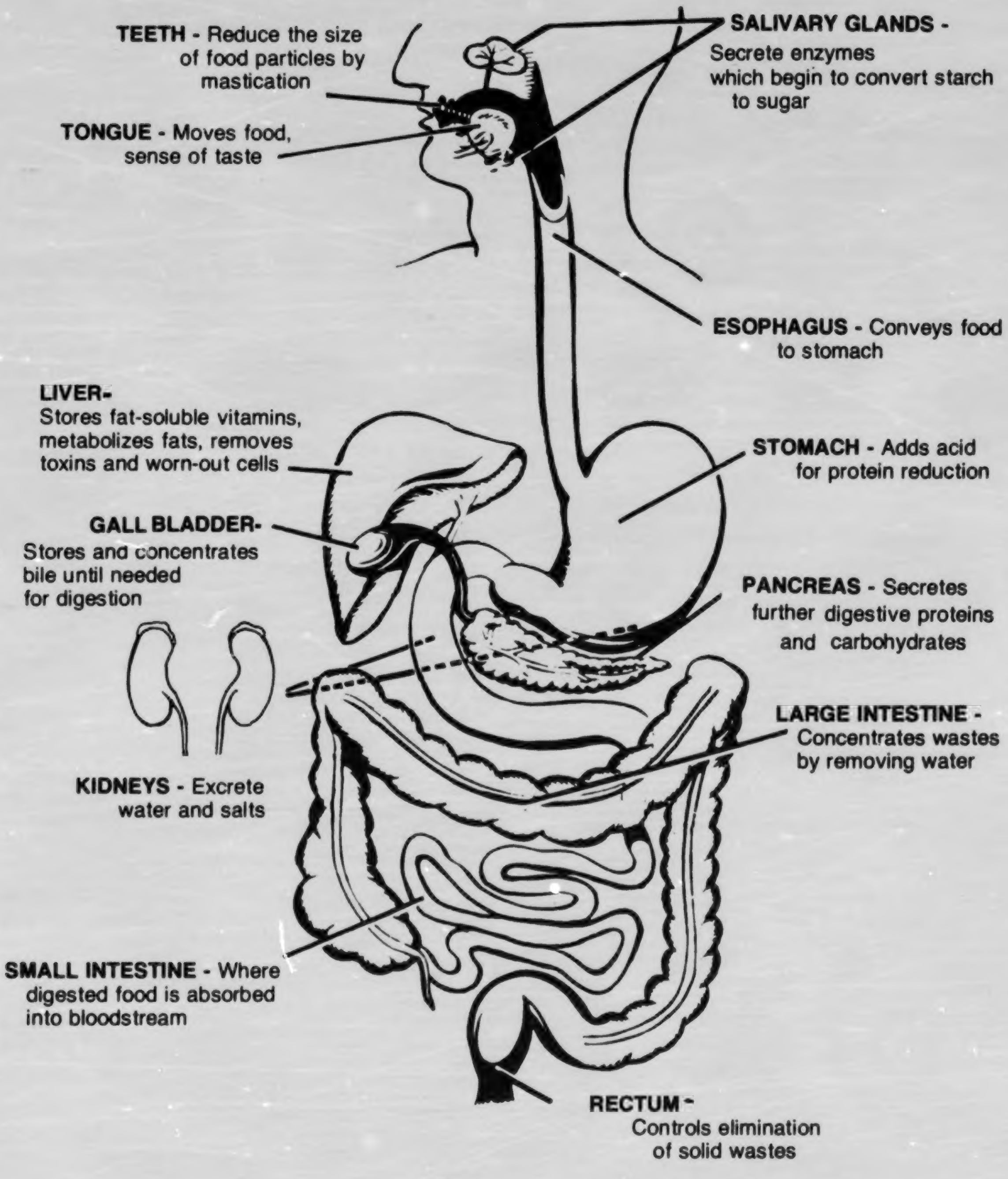
Digestive Process


TEETH - Reduce the size of food particles by mastication
TONGUE - Moves food, sense of taste
SALIVARY GLANDS - Secrete enzymes which begin to convert starch to sugar
ESOPHAGUS - Conveys food to stomach
LIVER- Stores fat-soluble vitamins, metabolizes fats, removes toxins and worn-out cells
STOMACH - Adds acid for protein reduction
GALL BLADDER- Stores and concentrates bile until needed for digestion
PANCREAS - Secretes further digestive proteins and carbohydrates
LARGE INTESTINE - Concentrates wastes by removing water
KIDNEYS - Excrete water and salts
SMALL INTESTINE - Where digested food is absorbed into bloodstream
RECTUM - Controls elimination of solid wastes

NUTRITION AS APPLIED TO DENTISTRY AND DIGESTION
UNIT I

ASSIGNMENT SHEET #1--EVALUATE PERSONAL FOOD HABITS

NAME ______________________________ SCORE ______________

A habit is a practice which has been done so frequently that it becomes automatic. Your food choices are largely the result of your eating habits. You have learned these food habits from your family and friends. After completion of this unit, you may decide that some of your food habits need changing. If you do decide this, you will not change overnight into a person bursting with good health. You may notice an increase in energy. However, remember that it took many years to make you as you are now. It will take a while to undo the effects of poor eating habits and to improve your sense of well-being.

Consider what you ate yesterday. Answer the questions below BEFORE beginning this unit. Then, answer the questions AFTER completing the entire nutrition unit. Does the check sheet show a trend in your food habits?

		Score Yourself	BEFORE	AFTER
Vegetables	1 serving	10		
Deep green or deep yellow vegetables (broccoli, carrots, or other foods rich in vitamin A)	1 serving	10		
Fruit	1 serving	10		
Oranges, grapefruit, tomatoes, or other foods rich in vitamin C	1 serving	10		
Milk and milk products	3-4 servings	10		
Meat, eggs, poultry, fish, peanut butter, or other foods rich in protein	2 servings	10		
Breads or cereal	4 servings	10		
Fats, margarine, butter	1 T	10		
3 balanced meals		20		
	Total	100		

NUTRITION AS APPLIED TO DENTISTRY AND DIGESTION
UNIT I

JOB SHEET #1--PREPARE A LINGUAL VITAMIN C TEST

(NOTE: The lingual vitamin C test reflects the metabolism of tissue cells and supporting structures in the mouth. This test is administered by the assistant and interpreted by the dentist.)

I. Equipment

   A. 5 cc syringe fitted with 25 gauge needle

   B. Distilled water

   C. Vial of Pro "C" powder

      (NOTE: The powder is available under the trade name Pro "C" powder and can be purchased at most drug stores or ordered from a drug supply company.)

   D. 2 x 4 sterile gauze sponges

   E. Watch or clock with second hand

II. Procedure

   A. Prepare dye

      1. Draw 5 cc of distilled water into syringe

      2. Expel water into vial of Pro "C" powder

         (NOTE: The powder does not dissolve easily; shaking or holding vial in ultrasonic cleaner bath will help. Be sure to date vial, as prepared mixture will only keep for five days.)

   B. Explain to patient the test and procedures

   C. Have patient rinse mouth

   D. Ask patient to extrude tongue

   E. Blot tongue with sterile 2 x 2 gauze

   F. Hold syringe in right or left hand

   G. Place one drop of dye on right or left side of the tongue

      (NOTE: Do not place dye on the midline of tongue. Make sure it is on the side of tongue [fungiform papillae].)

JOB SHEET #1

H. Watch time

(NOTE: The dye should disappear in 45 seconds. If it doesn't disappear in 45 seconds, the patient has a vitamin C deficiency or you have made a mistake.)

I. Observe tongue until dye disappears

J. Record time elapsed

Did you...

Use an expired dye?

Forget to blot the tongue?

Place dye on correct part of tongue?

Use only one drop?

Time the test accurately?

NUTRITION AS APPLIED TO DENTISTRY AND DIGESTION
UNIT I

TEST

NAME ________________________________ SCORE ______________

1. Match the terms associated with nutrition to the correct definitions by placing the correct numbers in the blanks provided.

_____a. Study of food and its relation to health

_____b. Chemical compounds found in food necessary for good health

_____c. Foods which are eaten to satisfy an appetite

_____d. Building up and breaking down process by which substances can be utilized by the body

_____e. Lack or loss of appetite for food

_____f. Absence of free hydrochloric acid in the stomach

_____g. Process of absorbing food by the digestive organs and turning it into living tissue

_____h. Science related to the causes of disease

_____i. Combination with oxygen

_____j. Organic compound of carbon, hydrogen, and oxygen which combines with glycerol to make a fat

_____k. Chemical compounds which are components of proteins

_____l. Chemical compounds of carbon, hydrogen, and oxygen; sugars and starches

_____m. Complex organic compounds containing carbon, hydrogen, nitrogen, phosphorous, iodine, copper, usually sulfur, and sometimes iron

1. Anorexia
2. Nutrition
3. Assimilation
4. Nutrients
5. Diet
6. Achlorhydria
7. Etiology
8. Metabolism
9. Oxidation
10. Proteins
11. Carbohydrates
12. Amino acids
13. Fatty acid

_____n. Combination of fatty acid and glycerol, containing the elements carbon, hydrogen, and oxygen

_____o. Lack of necessary food substances in the body

_____p. Biting and tearing food into pieces which can be chewed

_____q. Grinding of food

_____r. Mixing of saliva with food during chewing

_____s. Enhances pleasure of food and stimulates digestion

_____t. Swallowing of food

14. Malnutrition
15. Incision
16. Mastication
17. Taste
18. Deglutition
19. Fats
20. Insalivation

2. Select from the following list the correct classifications of nutrients. Mark each correct answer with an "X."

_____a. Fats

_____b. Milk

_____c. Cellulose or roughage

_____d. Paper

_____e. Carbohydrates

_____f. Minerals

_____g. Energy

_____h. Proteins

_____i. Salt

_____j. Beef

_____k. Water

_____l. Vitamins

3. List the functions of food.

a. ____

b. ____

c. ____

4. List four purposes of good nutrition.

a. ____

b. ____

c. ____

d. ____

5. Select from the list below the primary causes of nutritional deficiencies. Mark each correct answer with an "X."

_____a. Consumption of nutrient-deficient foods

_____b. Anorexia due to disease

_____c. Drugs

_____d. Lack of proper food

_____e. Lack of ambition to prepare food

_____f. Alcoholism

_____g. Not enough time

_____h. Poor food habits

6. Match the adult daily requirements on the right to the correct basic four food groups by placing the correct numbers in the blanks provided. An answer may be used more than once.

_____a. Fruit and vegetable group	1. Two servings
_____b. Bread and cereal group	2. Two or more servings
_____c. Milk group	3. Four or more servings
_____d. Meat group	

7. Describe the importance of breakfast.

____

____

____

____

____

____

8. Select from the list below sources of carbohydrates. Mark each correct answer with an "X."

_____a. Milk and dairy products

_____b. Fruits

_____c. Meat and meat products

_____d. Grains and grain products

_____e. Sugar and sugar products

_____f. Water

9. List types of fats.

a. ____________________

b. ____________________

10. Distinguish between functions of fats and functions of carbohydrates. Place an "F" for fat and "C" for carbohydrate in the correct blanks.

_____a. Provide lactose

_____b. Aid growth and maintenance

_____c. Insulate body and pad some vital organs

_____d. Facilitate normal oxidation of fat

_____e. Carry and facilitate absorption of fat-soluble vitamins

_____f. Provide heat and energy

_____g. Provide glucose

11. Distinguish between complete proteins and incomplete proteins by placing an "X" to the left of the description of complete proteins.

_____a. Do not contain all essential amino acids

_____b. Contain all essential amino acids

12. Select from the list below functions of proteins. Mark each correct answer with an "X."

_____a. Build and repair cells and tissues

_____b. Help maintain water balance

_____c. Necessary for vision

_____d. Help maintain good appetite

_____e. Act as solvents for all products of digestion

_____f. Provide heat and energy

_____g. Help manufacture chemicals

13. Complete the chart below by filling in the correct information relating to minerals, their sources, or functions.

a. ________	Milk and milk products; seafood; leafy green vegetables; oranges and figs	Formation of bone tissue; Regulation of muscle contractions and heart beat; Proper absorption of iron
Phosphorus	Whole grain cereals; meats; milk and milk products	b. ________ ________
Iron	c. ________ ________	Manufacture of new blood cells
d. ________	Baking powder and baking soda; table salt; orange juice	Maintains normal water balance; regulation of muscle irritability; maintenance of normal acid-base balance
Iodine	e. ________	Formation of thyroid hormone that controls metabolic rate
Fluorine	Fluoridated drinking water	f. ________

14. Match vitamins to their functions by placing the correct numbers in the blanks provided.

_____ a. Essential for normal blood clotting

_____ b. Maintains health of the dentin, cartilage, and matrix of bone

_____ c. Necessary for vision

_____ d. Aids oxidation process of living cell

_____ e. Aids utilization of calcium and phosphorous

_____ f. Metabolizes carbohydrates

_____ g. Aids cellular respiration

_____ h. Prevents destruction of vitamin A

_____ i. Aids regeneration of blood

1. Vitamin A
2. Vitamin B_1 (Thiamine)
3. Vitamin B_2 (Riboflavin)
4. Vitamin B_3 (Niacin)
5. Vitamin B_{12}
6. Vitamin C
7. Vitamin D
8. Vitamin E
9. Vitamin K

15. Match the vitamins on the right to their sources. Each source may contain one or more of the vitamins.

______a. Sunshine
______b. Citrus fruits
______c. Liver
______d. Whole grain cereals
______e. Leafy green vegetables
______f. Vegetable oils
______g. Fortified milk
______h. Melons
______i. Eggs and milk

1. Vitamin A
2. Vitamin B_1 (Thiamine)
3. Vitamin B_2 (Riboflavin)
4. Vitamin B_3 (Niacin)
5. Vitamin B_{12}
6. Vitamin C
7. Vitamin D
8. Vitamin E
9. Vitamin K

16. Discuss functions of water in the diet.

____

____

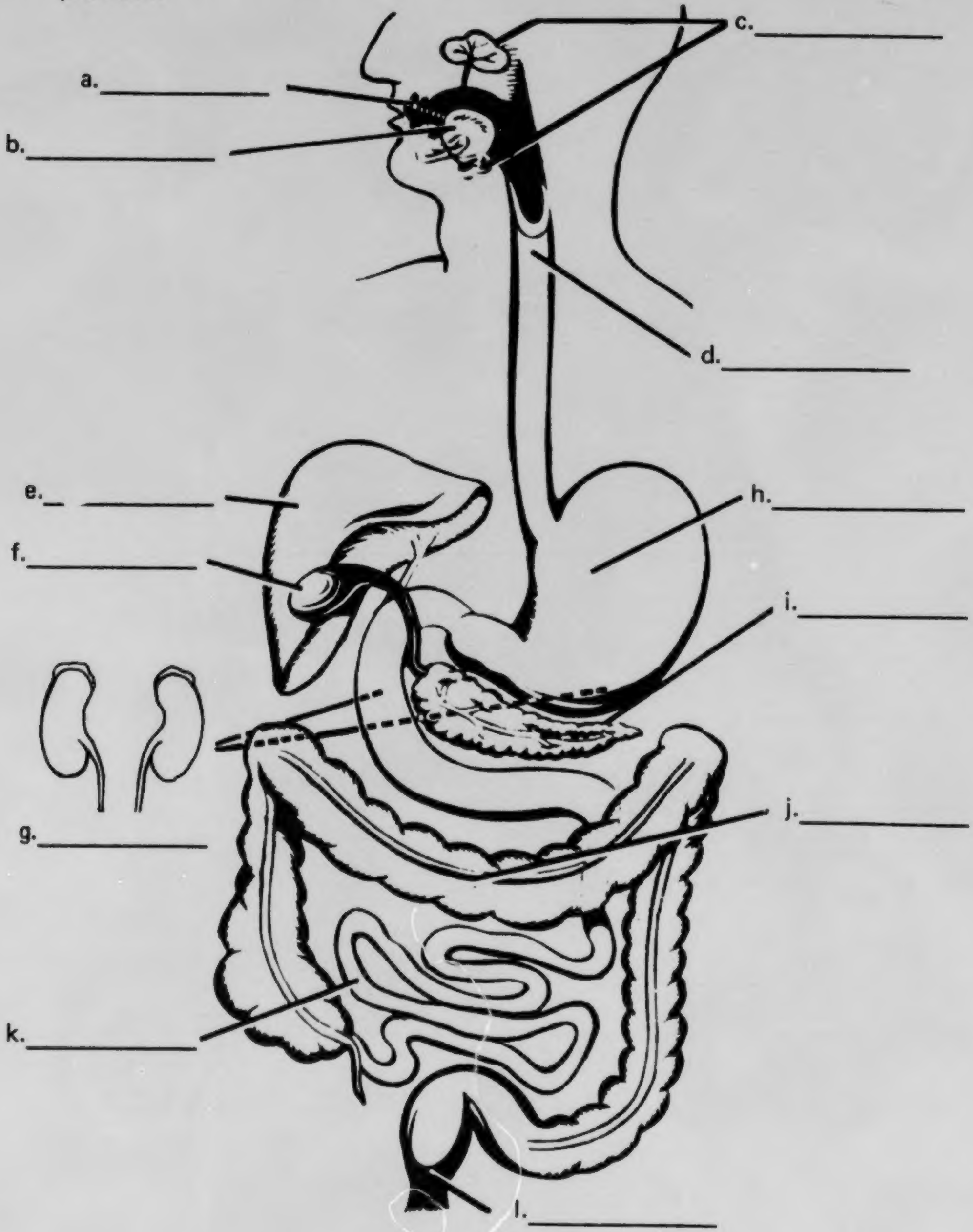
____

____

17. List foods which encourage growth of lactobacillus count in the mouth.

a. ____
b. ____

18. Identify parts of the digestive system by writing the correct name in the blanks provided.



Large intestine
Esophagus
Tongue
Gallbladder
Small intestine
Stomach
Teeth
Liver
Rectum
Pancreas
Salivary glands
Kidneys

19. Match parts of the digestive system to their functions by placing the correct numbers in the blanks provided.

_____a. Reduce the size of food particles by mastication

_____b. Moves food, sense of taste

_____c. Secrete enzymes which begin to convert starch to sugar

_____d. Conveys food to the stomach

_____e. Adds acid for protein reduction

_____f. Stores fat-soluble vitamins, metabolizes fats, removes toxins and worn-out cells

_____g. Stores and concentrates bile until needed for digestion

_____h. Secretes further digestive proteins and carbohydrates

_____i. Where digested food is absorbed into the bloodstream

_____j. Concentrates waste by removing water

_____k. Excrete water and salts

_____l. Controls elimination of solid wastes

1. Liver
2. Stomach
3. Tongue
4. Kidneys
5. Pancreas
6. Teeth
7. Salivary glands
8. Large intestine
9. Rectum
10. Esophagus
11. Gallbladder
12. Small intestine

20. Evaluate personal food habits.

21. Demonstrate the ability to prepare a lingual vitamin C test.

(NOTE: If activities 20 and 21 have not been finished before the test, ask your instructor when they should be completed.)

NUTRITION AS APPLIED TO DENTISTRY AND DIGESTION
UNIT I

ANSWERS TO TEST

1.	a.	2	f.	6	k.	12	p.	15
	b.	4	g.	3	l.	11	q.	16
	c.	5	h.	7	m.	10	r.	20
	d.	8	i.	9	n.	19	s.	17
	e.	1	j.	13	o.	14	t.	18

2. a, c, e, f, h, k, l

3. a. Provides energy
   b. Regulates body processes
   c. Promotes growth

4. Any four of the following:
   a. Produces strong bones, muscles, and supportive tissue
   b. Provides greater personal energy and vitality
   c. Helps body resist illness
   d. Speeds healing
   e. Aids in maintaining good oral health

5. a, b, c, d, f, h

6. a. 3
   b. 3
   c. 1
   d. 2

7. Description should include:
   a. Increases attention span
   b. Maintains performance level
   c. Produces energy for the day
   d. Lessens the problem of obesity

8. a, b, d, e

9. a. Saturated
   b. Unsaturated

10. a. C
    b. F
    c. F
    d. C
    e. F
    f. C
    g. C

11. b

12. a, b, f, g

13. a. Calcium
    b. Maintain normal acid-base balance
    c. Liver or kidney; enriched cereal; leafy green vegetables; dried beans and peas
    d. Sodium and potassium
    e. Seafood; iodized table salt
    f. Increases resistance to dental caries

14. a. 9
    b. 6
    c. 1
    d. 3
    e. 7
    f. 2
    g. 4
    h. 8
    i. 5

15. a. 7
    b. 6
    c. 1, 2, 3, 5
    d. 2, 3, 4
    e. 1, 3, 6, 8, 9
    f. 8
    g. 7
    h. 6
    i. 1, 3, 5

16. Discussion should include:
    a. Acts as solvent for all products of digestion
    b. Carries nutrients to the cells
    c. Aids regulation of body temperature
    d. Excretes waste products through the kidneys

17. a. Carbohydrates
    b. Starches

18. a. Teeth
    b. Tongue
    c. Salivary glands
    d. Esophagus
    e. Liver
    f. Gallbladder
    g. Kidneys
    h. Stomach
    i. Pancreas
    j. Large intestine
    k. Small intestine
    l. Rectum

19. a. 6
    b. 3
    c. 7
    d. 10
    e. 2
    f. 1
    g. 11
    h. 5
    i. 12
    j. 8
    k. 4
    l. 9

20. Evaluated to satisfaction of instructor

21. Performance skills evaluated to satisfaction of instructor

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to trace the path of blood through the heart, read Fahrenheit thermometer, take oral temperature, pulse and respiration, and clean thermometers. This knowledge will be evidenced by completion of the assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After the completion of this unit, the student should be able to:

1. Match terms associated with the circulatory and respiratory systems to the correct definitions.
2. Match components of blood to the correct functions.
3. Match the blood vessels to their characteristics.
4. Identify the common carotid artery and its branches.
5. Identify veins of the head.
6. Arrange in order stages of blood circulating through the heart.
7. Identify the parts of the respiratory system.
8. Match the main parts of the respiratory system to their correct functions.
9. Describe the structure of the nasal cavity.
10. Trace the path of blood through the heart.
11. Read Fahrenheit thermometers.
12. Record temperature and blood pressure.
13. Demonstrate the ability to:
    a. Take oral temperature.
    b. Take pulse and respirations.
    c. Clean thermometers.
    d. Take blood pressure.

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

- A. Provide student with objective sheet.
- B. Provide student with information, assignment, and job sheets.
- C. Order film.
- D. Make transparencies.
- E. Discuss unit and specific objectives.
- F. Have students make posters depicting a variety of harmful activities affecting respiratory and circulatory systems.

  (NOTE: This may be used as a HOSA activity.)

  Examples: Smoking, obesity, hypertension
- G. Provide student with equipment to be used in job sheets.
- H. Demonstrate and discuss procedures outlined in job sheets.
- I. Give test.

II. Instructional materials:

- A. Objective sheet
- B. Information sheet
- C. Transparency masters
  1. TM 1--Composition of Blood
  2. TM 2--Diffusion of Oxygen and Carbon Dioxide
  3. TM 3--Relationship Between Cellular and Intercellular Fluid
  4. TM 4--Common Carotid Artery and Its Branches
  5. TM 5--Veins of the Head
  6. TM 6--Path of Blood Through Heart
  7. TM 7--The Respiratory Tract

D. Assignment sheets

  1. Assignment Sheet #1--Trace the Path of Blood Through the Heart

  2. Assignment Sheet #2--Read Fahrenheit Thermometers

  3. Assignment Sheet #3--Record Temperature and Blood Pressure

E. Answers to assignment sheets

F. Job sheets

  1. Job Sheet #1--Take Oral Temperature

  2. Job Sheet #2--Take Pulse and Respirations

  3. Job Sheet #3--Clean Thermometers

  4. Job Sheet #4--Take Blood Pressure

G. Test

H. Answers to test

III. Unit references:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia, Pennsylvania: W. B. Saunders Co., 1976.

B. Thomas, Virginia E. *Life Sciences for Health Technologies.* Huntington Beach, California: Technicourse Inc., 1977.

C. Rogers, Helen. *Nursing I.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

D. Anderson, Pauline C. *The Dental Assistant.* Albany, New York: Delmar Publishing/Litton Educational Publishing, Inc., 1974.

E. Sloan, Jamee. *Health Service Careers.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

IV. Additional materials: "Polar Motion Kit and Spinner." Available from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 West Sixth, Stillwater, OK 74074.

(NOTE: This set consists of pulmonary and systemic circulation and general structural and functional aspects of the circulatory system. The transparencies are sold only as a set and require a motorized spinner. The price is $120.00.)

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

INFORMATION SHEET

I. Terms and definitions

  A. Capillaries--Microscopic blood vessels

  B. Atrium--Upper chamber of the heart which receives blood into the heart

  C. Ventricle--Lower chamber of the heart which pumps blood out of the heart

  D. Inspiration--Drawing air into the lungs

  E. Expiration--Releasing air from the lungs

  F. Respiration--Exchange of oxygen and carbon dioxide in the body

  G. Sinuses--Cavities in the skull connected with the nasal cavity

  H. Pharynx--Muscular passageway for food and liquids into the esophagus and for air into the lungs

  I. Adenoids--Masses of lymphoid tissue found in the nasopharynx

  J. Tonsils--Masses of lymphoid tissue found in the oropharynx

  K. Eustachian tubes--Passageways which connect the middle ear and the pharynx

  L. Larynx--Voice box

  M. Ventilation--Supplying oxygen to the body through the lungs

II. Components of blood (Transparencies 1-3)

  A. Erythrocytes (RBC, hemoglobin)--Carry oxygen to tissues and carbon dioxide from tissues

  B. Leukocytes (WBC)--Defend body against disease by engulfing foreign matter

  C. Platelets--Aid in formation of blood clots

  D. Plasma--Carries nutritive materials to tissues and waste from tissues

INFORMATION SHEET

III. Characteristics of blood vessels

  A. Arteries

    1. Carry blood from heart

    2. Have thick, elastic walls

    3. Are felt to check pulse rate

  B. Veins

    1. Carry blood back to heart

    2. Have thinner, less elastic walls than arteries

    3. Have valves in some to keep blood from flowing in wrong direction

  C. Capillaries

    1. Complete the circuit between arteries and veins

    2. Have walls made of single layer of cells

    3. Diffuse food and oxygen to tissue from blood

    4. Diffuse carbon dioxide and waste from tissues into blood

IV. Common carotid artery and its branches (Transparency 4)

  A. Common carotid

  B. Internal carotid

  C. Inferior alveolar

  (NOTE: The blood passes through the mandibular foramen as seen in the transparency.)

  D. Posterior superior alveolar

  E. Descending palatine

  F. Infraorbital

  G. Facial maxillary

  H. Lingual

  I. External carotid

INFORMATION SHEET

V. Veins of the head (Transparency 5)

(NOTE: Excessive irritation of infected tissue whose venous drainage passes directly or indirectly through the cavernous sinus may result in a spread of infection to the cavernous sinus and from there to the brain. Some of the veins of the face, particularly in the upper lip and nose areas, drain directly into the sinus.)

  A. External jugular
  B. Internal jugular
  C. Common facial
  D. Posterior facial (retromandibular)
  E. Inferior alveolar
  F. Maxillary
  G. Pterygoid venous plexus
  H. Cavernous dural sinus
  I. Infraorbital
  J. Angular
  K. Posterior superior alveolar
  L. Mental
  M. Anterior facial
  N. Lingual

VI. Stages of blood circulating through the heart (Transparency 6)

  A. From superior vena cava or inferior vena cava to the right atrium
  B. Through the tricuspid valve
  C. To the right ventricle
  D. Through the pulmonary semilunar valve
  E. To the pulmonary artery
  F. Through capillaries in lungs

  (NOTE: Here the blood is oxygenated and purified.)

INFORMATION SHEET

G. To the pulmonary veins

H. To the left atrium

I. Through the bicuspid (mitral) valve

J. To the left ventricle

K. Through the aortic semilunar valve

L. To the aorta

(NOTE: From here the blood is circulated throughout the body.)

VII. Parts of the respiratory system (Transparency 7)

A. Frontal sinus

B. Nasal cavity

C. Sphenoidal sinus

(NOTE: There are two frontal sinuses, two nasal cavities, and two sphenoidal sinuses, one on each side of the skull.)

D. Nasopharynx

E. Oropharynx

F. Epiglottis

G. Laryngopharynx

H. Larynx

I. Trachea

J. Lungs

K. Bronchi

L. Diaphragm

252

M. Bronchiole

N. Alveoli

INFORMATION SHEET

VIII. Functions of main parts of respiratory system

A. Nasal cavities

1. Remove foreign bodies by trapping them on surface of mucous membrane

   Examples: Dust particles, bacteria

2. Moisten and warm air before it reaches lungs

3. Aid sense of smell

B. Pharynx and pharyngeal structures

1. Passageway for food, fluids, and air

2. Adenoids and tonsils serve as filters

   Examples: Microorganisms and other foreign substances

3. Eustachian tubes equalize pressure in middle ear

C. Trachea--Conducts air to and from lungs

D. Lungs

1. Air passes into the alveoli

2. Alveoli are the functional units

3. Alveoli enable blood and air to come close enough together to allow gaseous exchange

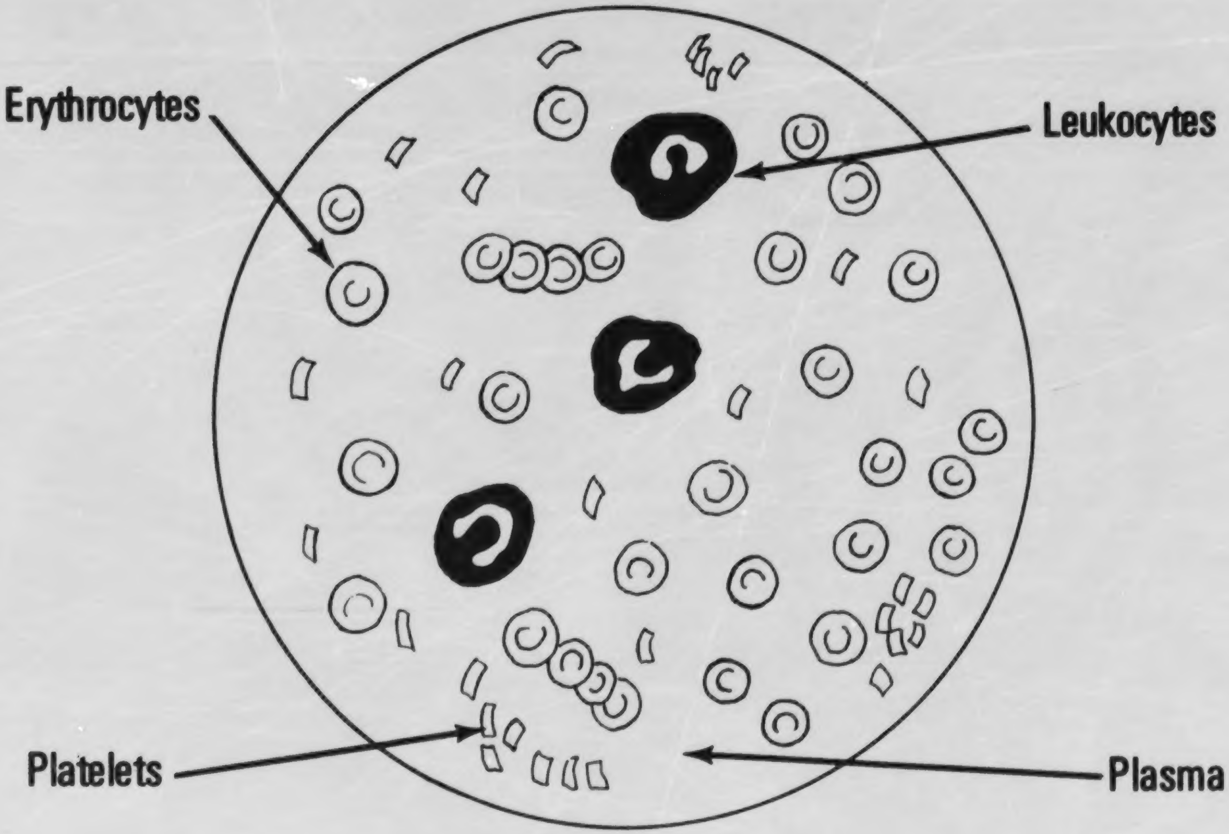
IX. Structure of the nasal cavity

A. Nasal cavities separated by a partition (nasal septum)

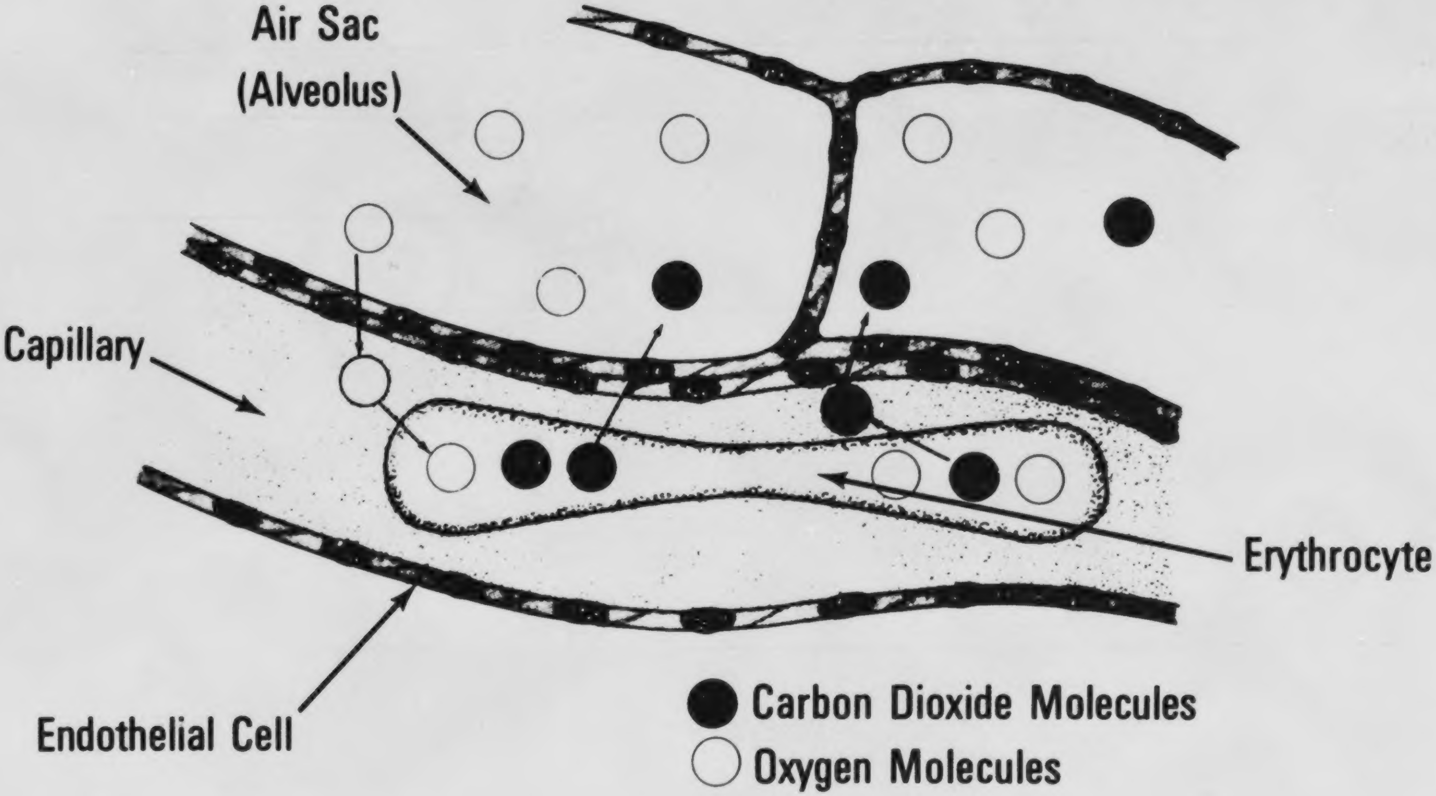
B. Three small bones, the turbinates, project into each nasal cavity

C. Nasal cavities are lined with mucous membrane

Composition of Blood


Erythrocytes
Leukocytes
Platelets
Plasma

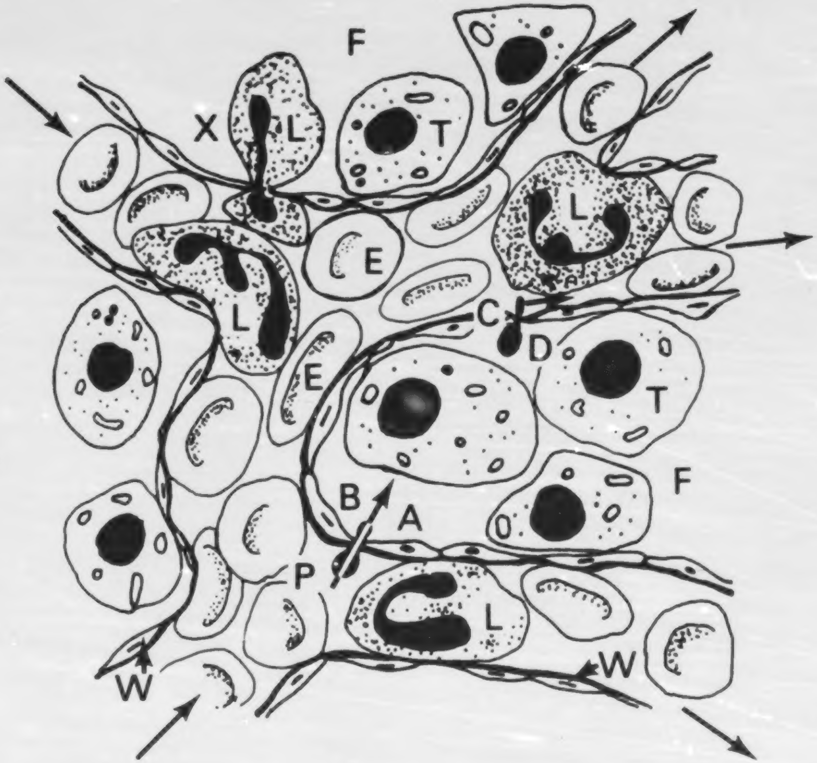
Diffusion of Oxygen and Carbon Dioxide


Air Sac
(Alveolus)
Capillary
Endothelial Cell
Erythrocyte
● Carbon Dioxide Molecules
○ Oxygen Molecules

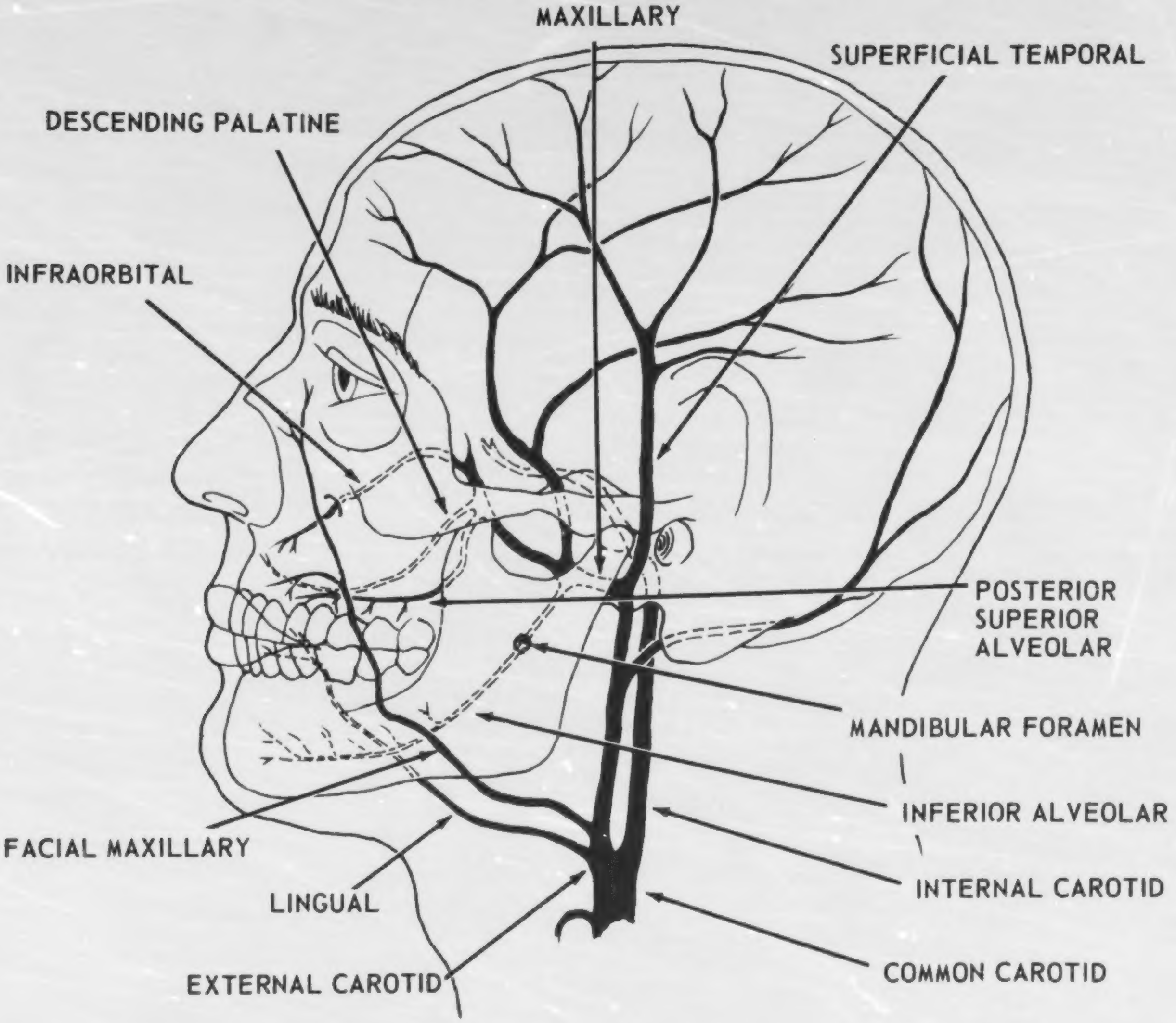
Relationship Between Cellular and Intercellular Fluid

(Key: F-intracellular fluid, T-tissue cells, P-plasma, W-capillary wall, E-erythrocyte, L-leukocyte.) At A soluble food and B oxygen are passing from arteriole into tissue. At C wastes and D carbon dioxide are leaving through a venule.

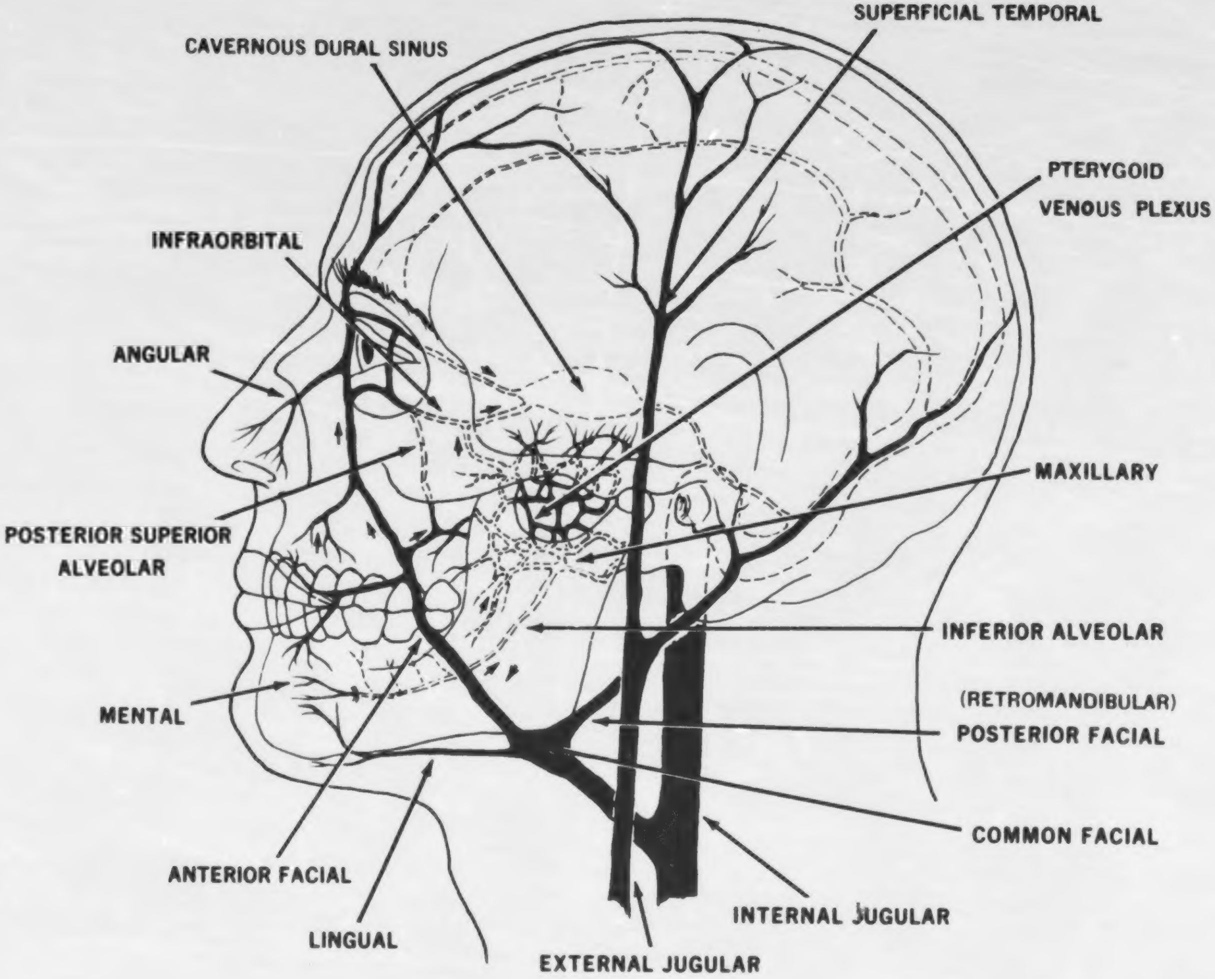
Note leukocyte passing between two cells at X.



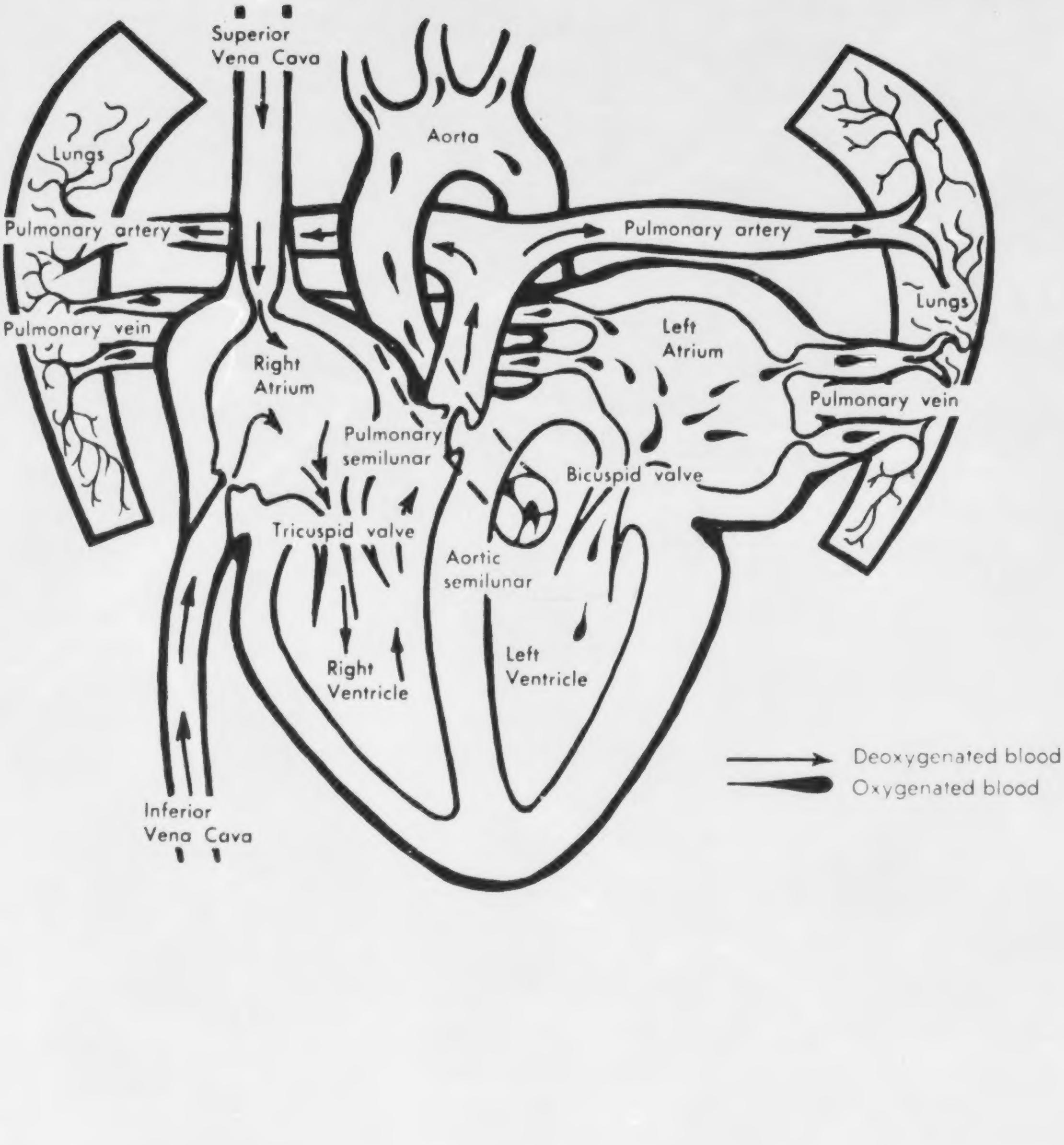
Common Carotid Artery and Its Branches


MAXILLARY
SUPERFICIAL TEMPORAL
DESCENDING PALATINE
INFRAORBITAL
POSTERIOR SUPERIOR ALVEOLAR
MANDIBULAR FORAMEN
INFERIOR ALVEOLAR
INTERNAL CAROTID
FACIAL MAXILLARY
LINGUAL
EXTERNAL CAROTID
COMMON CAROTID

Veins of the Head


SUPERFICIAL TEMPORAL
CAVERNOUS DURAL SINUS
PTERYGOID VENOUS PLEXUS
INFRAORBITAL
ANGULAR
MAXILLARY
POSTERIOR SUPERIOR ALVEOLAR
INFERIOR ALVEOLAR
(RETROMANDIBULAR) POSTERIOR FACIAL
MENTAL
COMMON FACIAL
ANTERIOR FACIAL
INTERNAL JUGULAR
LINGUAL
EXTERNAL JUGULAR

Path of Blood Through Heart


Superior
Vena Cava
Aorta
Lungs
Pulmonary artery
Pulmonary artery
Lungs
Pulmonary vein
Left
Atrium
Right
Atrium
Pulmonary vein
Pulmonary
semilunar
Bicuspid valve
Tricuspid valve
Aortic
semilunar
Left
Ventricle
Right
Ventricle
Deoxygenated blood
Oxygenated blood
Inferior
Vena Cava

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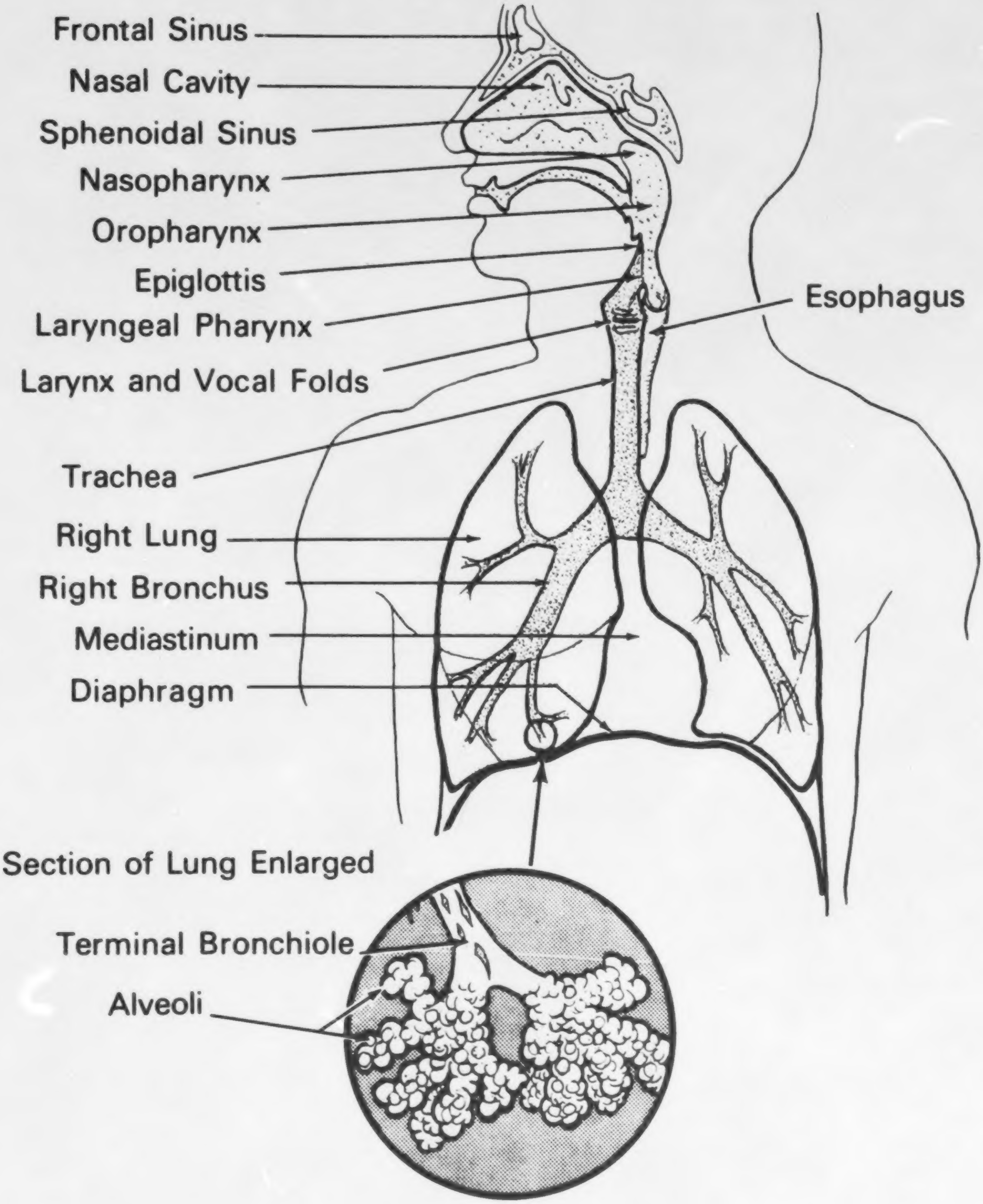
The Respiratory Tract

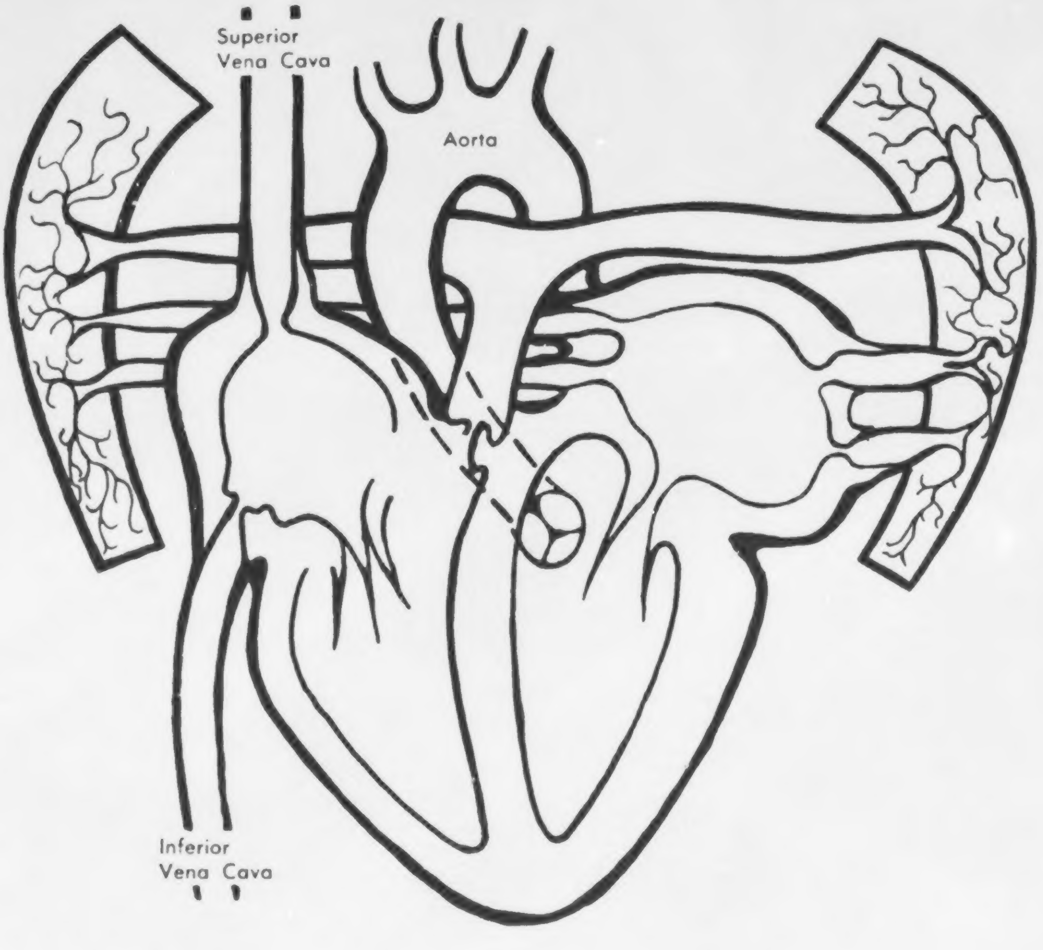

Frontal Sinus
Nasal Cavity
Sphenoidal Sinus
Nasopharynx
Oropharynx
Epiglottis
Laryngeal Pharynx
Larynx and Vocal Folds
Esophagus
Trachea
Right Lung
Right Bronchus
Mediastinum
Diaphragm
Section of Lung Enlarged
Terminal Bronchiole
Alveoli

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

ASSIGNMENT SHEET #1--TRACE THE PATH OF BLOOD THROUGH THE HEART

NAME ______________________________ SCORE ______________

Trace the path of blood through the heart by drawing arrows.


Superior
Vena Cava
Aorta
Inferior
Vena Cava

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CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

ASSIGNMENT SHEET #2--READ FAHRENHEIT THERMOMETERS

NAME ______________________________ SCORE ______________

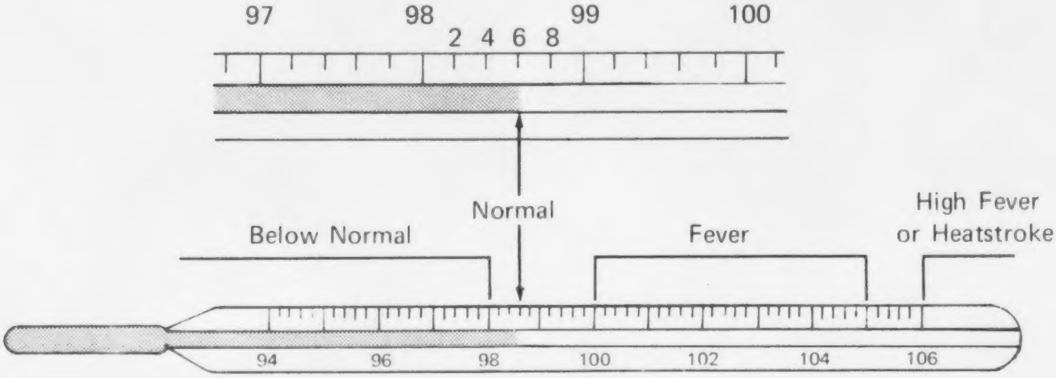
The clinical thermometer measures body temperature to the nearest two-tenths of a degree.

Part A

Use the following procedure to read the thermometers on the following pages.

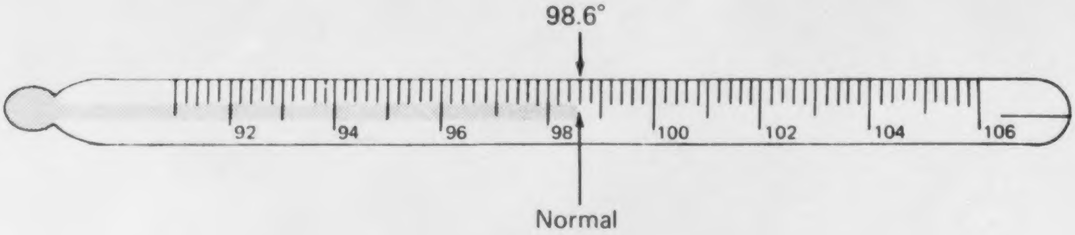
1. Hold thermometer at eye level. Rotate thermometer until you can clearly see column of mercury.

2. Observe markings, called *calibrations*, on the scale which is at upper side of the column of mercury. Remember that each of the long lines represents a full degree and the four short lines represent 2/10 (0.2) of a degree. Only even numbered degrees are named on a Fahrenheit clinical thermometer, that is 96°, 98°, 100°, and so on.


97
98
99
100
2
4
6
8
Normal
Below Normal
Fever
High Fever or Heatstroke
94
96
98
100
102
104
106

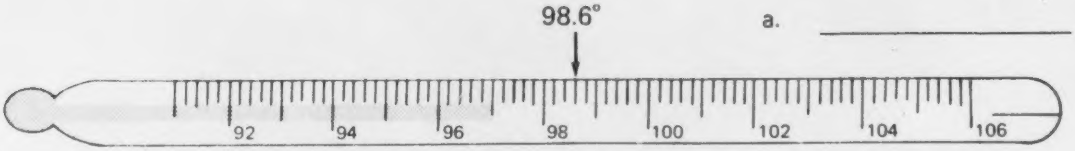
ASSIGNMENT SHEET #2

3. If mercury column ends at one of the short lines, look to see which long line is immediately to the left. That will tell you the degree of temperature. For example, 90°F is marked by the long line. The short lines indicate the temperature is 98.6°F. Temperature may also be written 98°.

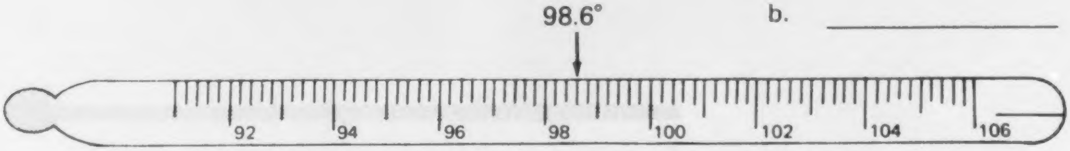

98.6°
92
94
96
98
100
102
104
106
Normal

Part B

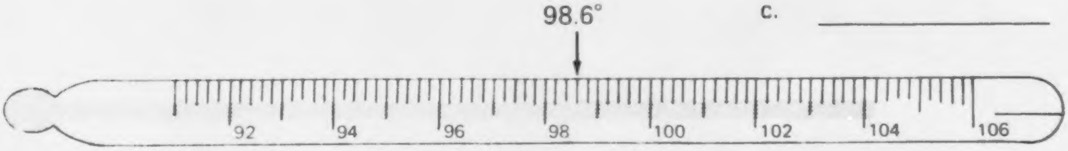
1. Write these thermometer readings in the blanks to the right.


98.6°
92
94
96
98
100
102
104
106

a. ____________________


98.6°
92
94
96
98
100
102
104
106

b. ____________________

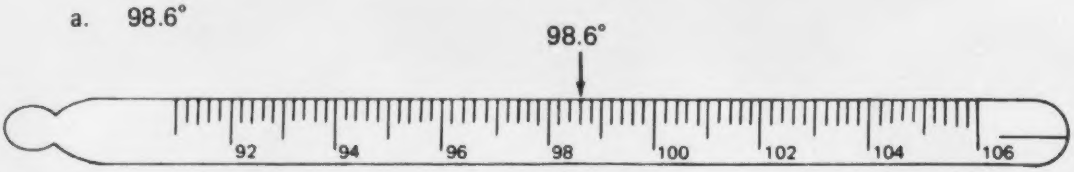

98.6°
92
94
96
98
100
102
104
106

c. ____________________

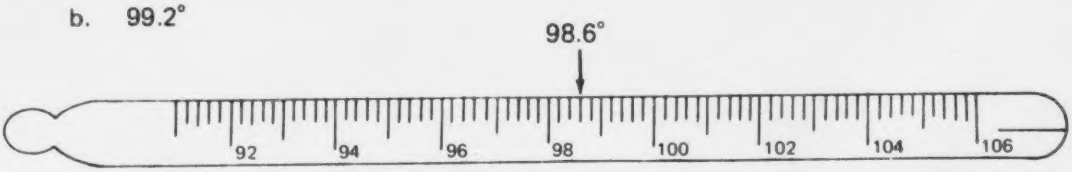
ASSIGNMENT SHEET #2

2. Mark the temperature readings on these thermometers below.

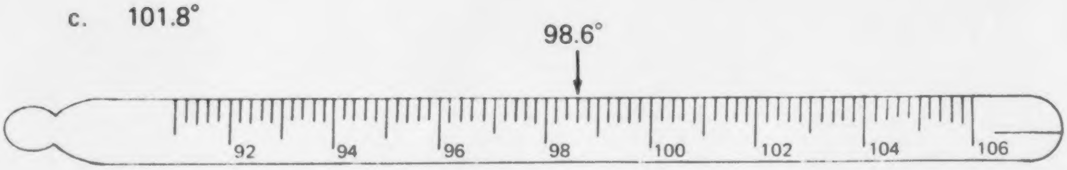
a. 98.6°


98.6°
92
94
96
98
100
102
104
106

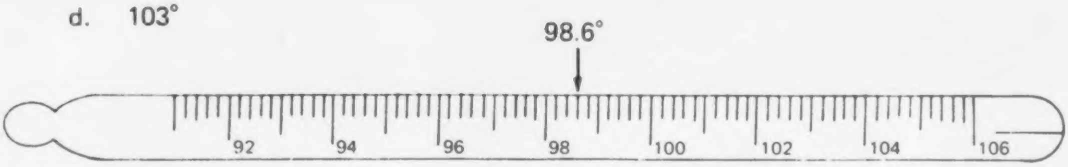
b. 99.2°


98.6°
92
94
96
98
100
102
104
106

c. 101.8°


98.6°
92
94
96
98
100
102
104
106

d. 103°


98.6°
92
94
96
98
100
102
104
106

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

ASSIGNMENT SHEET #3--RECORD TEMPERATURE AND BLOOD PRESSURE

NAME ______________________ SCORE ______________

Accurate measurement and recording of vital signs is an important aid in the evaluation of a patient's condition. You will be asked to record vital signs on the dental chart.

Record the following temperatures and blood pressures on the Vital Signs Record below.

T	BP
99.2	120/80
100.4	126/82
102.6	132/86
103.8	140/98
103	144/100
101.4	138/92
99	128/88

VITAL SIGNS RECORD

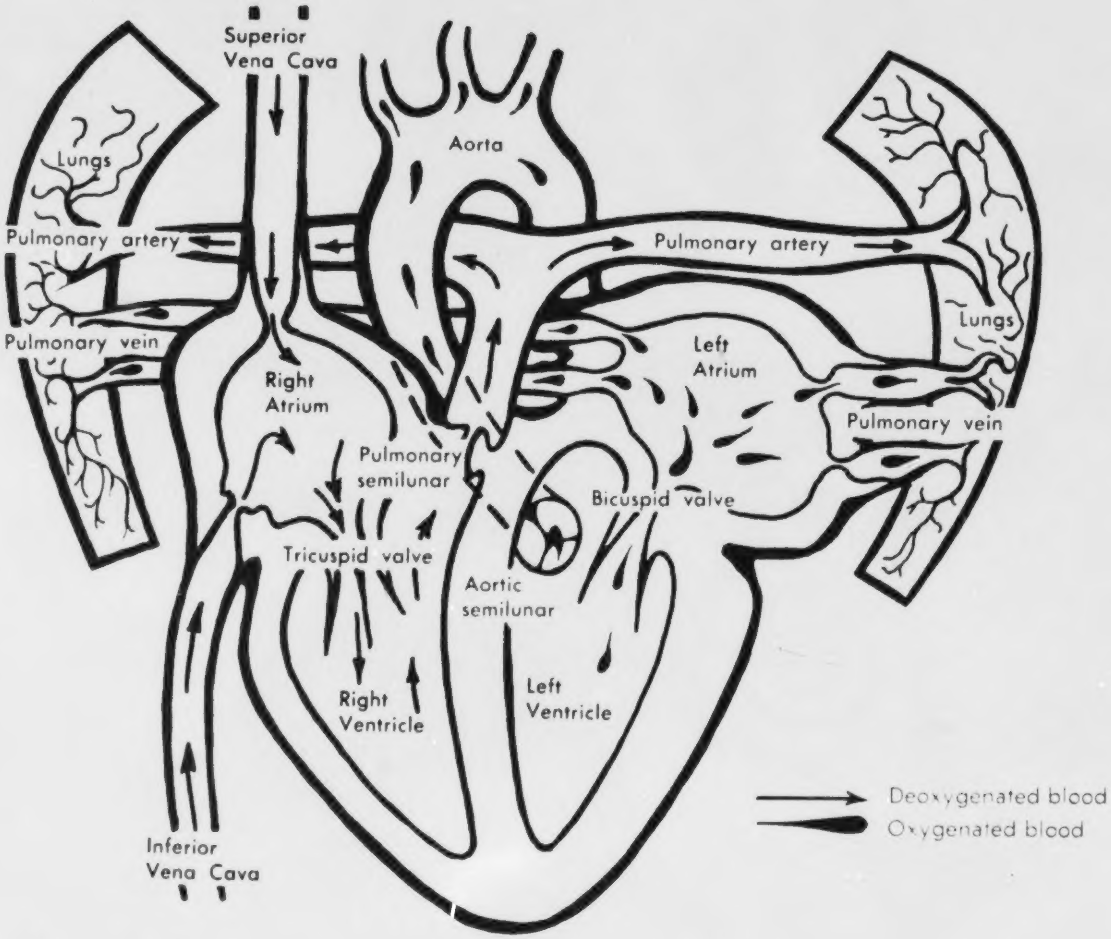
DATE	T	BP	

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

Diagram should be as follows:


Superior Vena Cava
Aorta
Lungs
Pulmonary artery
Pulmonary artery
Lungs
Pulmonary vein
Left Atrium
Right Atrium
Pulmonary vein
Pulmonary semilunar
Bicuspid valve
Tricuspid valve
Aortic semilunar
Left Ventricle
Right Ventricle
Deoxygenated blood
Oxygenated blood
Inferior Vena Cava

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Assignment Sheet #2

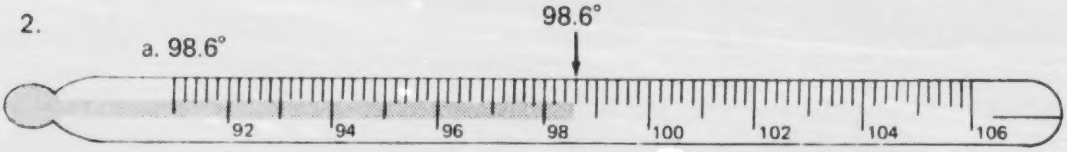
1. a. 97°F

   b. 100.6°F

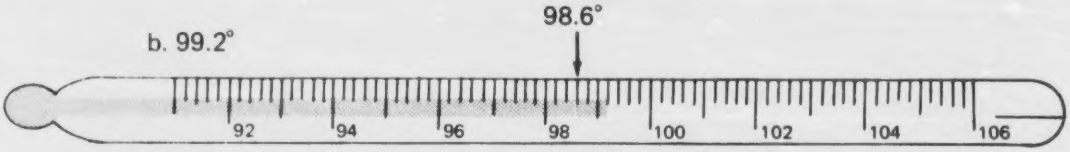
   c. 104.2°F

2\.

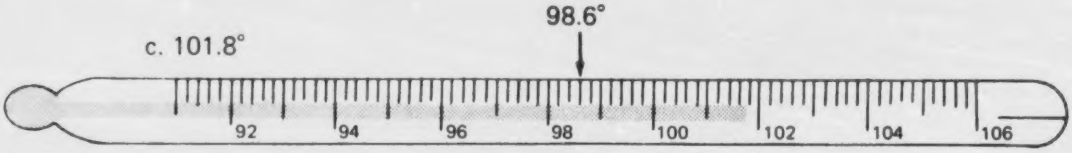
a. 98.6°


98.6°
92
94
96
98
100
102
104
106

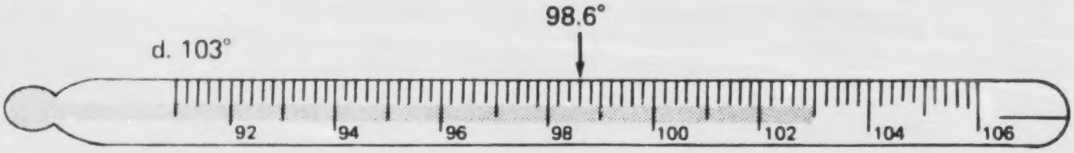
b. 99.2°


98.6°
92
94
96
98
100
102
104
106

c. 101.8°


98.6°
92
94
96
98
100
102
104
106

d. 103°


98.6°
92
94
96
98
100
102
104
106

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

JOB SHEET #1--TAKE ORAL TEMPERATURE

I. Equipment needed

   A. Mercury-type thermometer and holder with antiseptic solution or electronic thermometer with plastic sheaths

   B. Watch with second hand

   C. Paper and pencil

   D. Clean tissue

II. Procedure for mercury-type thermometer

   A. Wash hands

   B. Assemble equipment and take to bedside or dental chair

   C. Identify patient and explain procedure

   (CAUTION: Do not take temperature if patient has recently taken hot or cold drink or is smoking.)

   D. Remove thermometer from container, holding near end opposite mercury bulb; shake mercury down to 95°F or below

   E. Place mercury bulb under patient's tongue; ask patient to keep lips closed without biting thermometer; leave thermometer in place for three minutes; remain with patient if necessary

   (NOTE: Pulse and respirations may be counted at this time.)

   F. Remove and wipe thermometer with tissue from stem to bulb; discard tissue

   G. Read thermometer and record reading on paper immediately

   H. Recheck temperature, if indicated

   I. Care for thermometer

      1. Shake mercury down

      2. Clean thermometer starting from the top and work downward using a twisting motion; place thermometer in holder

      (NOTE: Use institution's procedure for cleaning thermometer.)

      3. Replace equipment in designated area

JOB SHEET #1

J. Wash hands

K. Record temperature

L. Report unusual temperature to dentist

III. Procedure for electric thermometer

A. Wash hands

B. Assemble equipment

C. Activate electric thermometer according to instructions

D. Put on clean protective sheath

E. Place tip of probe under patient's tongue for required length of time and record temperature on paper

F. Discard protective sheath

G. Recheck temperature, if indicated

H. Replace equipment in designated area

I. Wash hands

J. Report unusually high or low temperature to dentist

K. Record temperature

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

JOB SHEET #2--TAKE PULSE AND RESPIRATIONS

I. Equipment needed

  A. Watch with second hand

  B. Pad and pencil

II. Procedure

  A. Wash hands

  B. Assemble equipment and take to dental chair

  C. Identify patient and explain procedure

  D. Place patient's arm across chest

  E. Place tips of first two fingers over radial artery on thumb side of wrist, exerting slight pressure

  (NOTE: Do not use thumb.)

  F. Count for one minute with second hand of watch when pulse is felt

  G. Count respirations after pulse count and while still holding wrist

  H. Record immediately on paper

  I. Wash hands

  J. Report pulse or respirations and any unusual observations

  K. Record on form provided

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

JOB SHEET #3--CLEAN THERMOMETERS

I. Equipment needed

- A. Two small basins
- B. Soap
- C. Cotton balls
- D. Disinfectant
- E. Thermometers

II. Procedure

- A. Assemble equipment
  - 1. Use cool water and soap to fill one basin
  - 2. Fill other basin with disinfectant
- B. Wash thermometers in soapy water using cotton balls; rinse with cool water (CAUTION: Handle thermometers with care to avoid breakage.)
- C. Place thermometers in disinfectant so all are covered
- D. Remove thermometers from disinfectant, rinse with cold water, and dry
- E. Store thermometer in designated place
- F. Replace equipment
- G. Wash hands

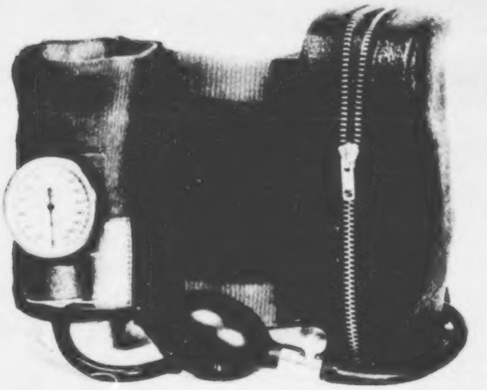
CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

JOB SHEET #4--TAKE BLOOD PRESSURE

I. Equipment needed

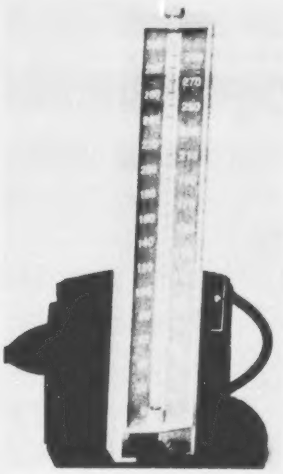
A. Sphygmomanometer (Figures 1 and 2)

FIGURE 1 Aneroid



Used by permission of Sybron Corporation, Medical Products Division, Rochester, N.Y.

FIGURE 2 Mercury



B. Stethoscope

C. Paper and pen

II. Procedure

A. Wash hands

B. Assemble equipment and take to bedside or dental chair

C. Identify patient and explain procedure

(NOTE: Patient should be lying down or sitting with arm supported by bed, table, or arm of chair.)

D. Apply cuff snugly to arm (preferably the left) above elbow with rubber bladder of cuff over brachial artery

E. Place ear pieces of stethoscope in your ears; tighten screw on rubber bulb of sphygmomanometer

JOB SHEET #4

F. Locate brachial artery pulse with fingertips and place diaphragm or bell of stethoscope over pulse beat

G. Inflate cuff by squeezing bulb until pulse ceases, then inflate cuff twenty points higher

H. Open valve (thumb screw), slowly releasing air until thumping sound is heard

I. Observe and remember the number where sound is heard; this is the systolic pressure

J. Continue to listen while releasing air gradually from cuff

K. Observe number where sound becomes muffled or dull; this is the diastolic pressure

L. Allow air to escape so pressure falls to zero

M. Wait one minute with cuff deflated, then repeat the procedures

DA - 81-B

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

TEST

NAME ________________________________ SCORE ______________

1. Match the terms on the right to the correct definitions by placing the correct numbers in the blanks provided.

______a. Microscopic blood vessels

______b. Lower chamber of the heart which pumps blood out of the heart

______c. Upper chamber of the heart which receives blood into the heart

______d. Drawing air into the lungs

______e. Releasing air from the lungs

______f. Exchange of oxygen and carbon dioxide in the body

______g. Cavities in the skull connected with the nasal cavity

______h. Muscular passageway for food and liquids into the esophagus and for air into the lungs

______i. Masses of lymphoid tissue found in the nasopharynx

______j. Masses of lymphoid tissue found in the oropharynx

______k. Passageways which connect the middle ear and the pharynx

______l. Voice box

______m. Supplying oxygen to the body through the lungs

1. Capillaries
2. Atrium
3. Ventricle
4. Larynx
5. Tonsils
6. Pharynx
7. Ventilation
8. Inspiration
9. Sinuses
10. Respiration
11. Eustachian tubes
12. Expiration
13. Adenoids

2. Match the components of blood to the correct functions. Place the correct numbers in the blanks provided.

______a. Defend body against disease by engulfing foreign matter

______b. Carries nutritive materials to tissues and waste from tissues

______c. Aid in formation of blood clots

______d. Carry oxygen to tissues and carbon dioxide from tissues

1. Erythrocytes (RBC, hemoglobin)
2. Leukocytes (WBC)
3. Platelets
4. Plasma

3. Match blood vessels on the right to their characteristics by placing the correct numbers in the blanks provided.

______a. Have thinner, less elastic walls than arteries

______b. Diffuse food and oxygen to tissue from blood

______c. Have walls made of single layer of cells

______d. Are felt to check pulse rate

______e. Diffuse carbon dioxide and waste from tissues into blood

______f. Carry blood back to heart

______g. Complete the circuit between arteries and veins

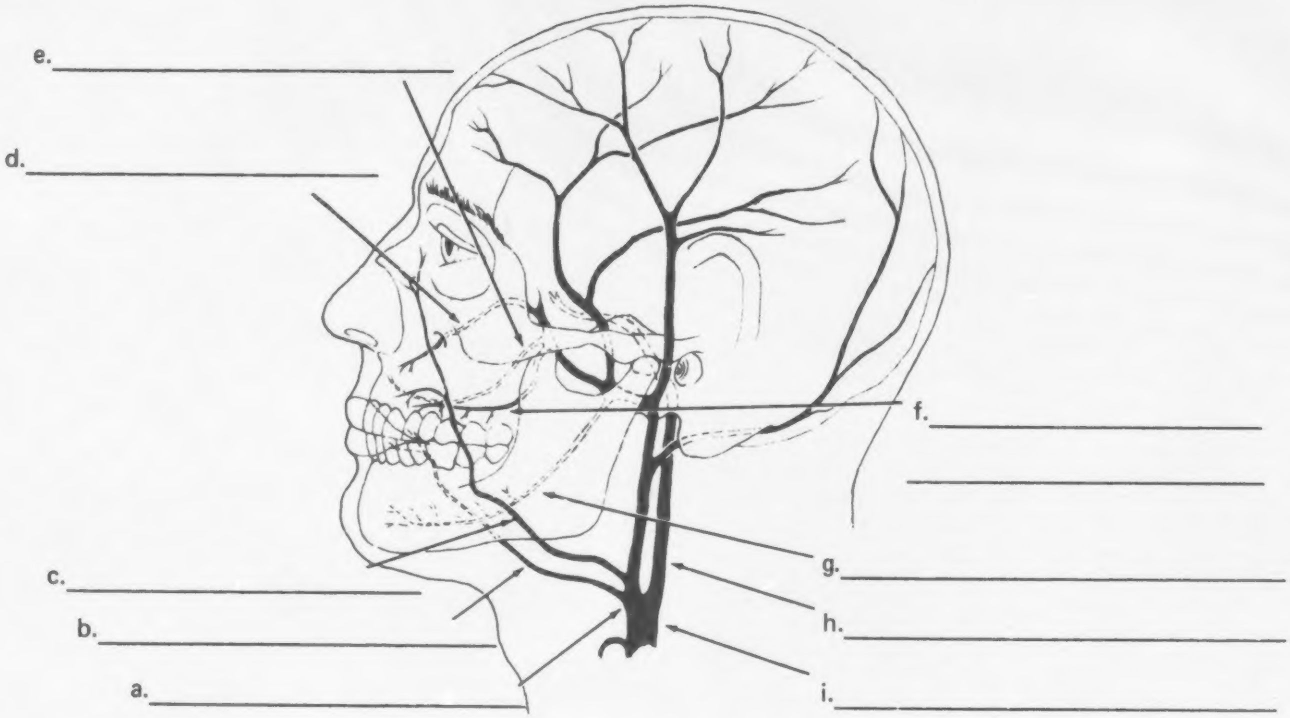
______h. Carry blood from heart

______i. Have valves in some to keep blood from flowing in wrong direction

______j. Have thick, elastic walls

1. Arteries
2. Veins
3. Capillaries

4. Identify common carotid artery and its branches by writing the correct names in the blanks provided.



Infraorbital

External carotid

Common carotid

Inferior alveolar

Facial maxillary

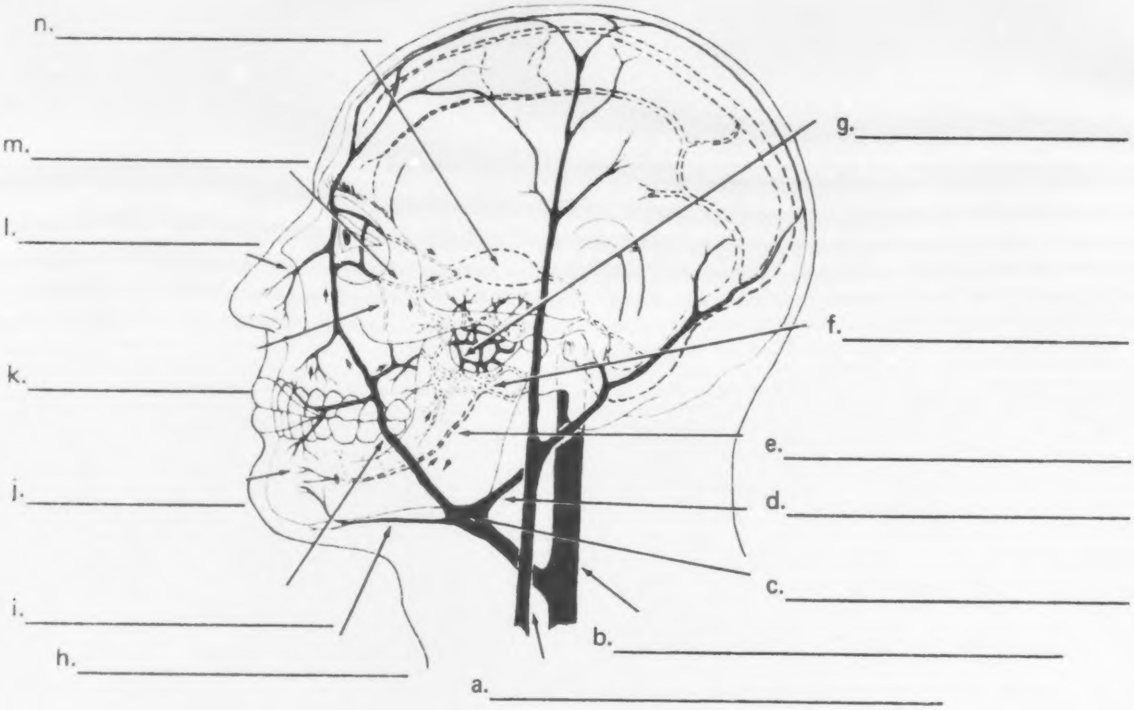
Internal carotid

Descending palatine

Lingual

Posterior superior alveolar

5. Identify the veins of the head in the diagram below. Write the correct names in the blanks provided.



Mental

Angular

Internal jugular

Maxillary

External jugular

Common facial

Lingual

Pterygoid venous plexus

Infraorbital

Posterior facial

Anterior facial

Inferior alveolar

Posterior superior alveolar

Cavernous dural sinus

6. Arrange in order the stages of blood circulating through the heart by placing a "1" for the first stage, a "2" for the second stage, and so on.

______a. To the left ventricle

______b. To the left atrium

______c. To the pulmonary artery

______d. To the right ventricle

______e. From superior vena cava or inferior vena cava to the right atrium

______f. To the pulmonary veins

______g. Through the tricuspid valve

______h. To the aorta

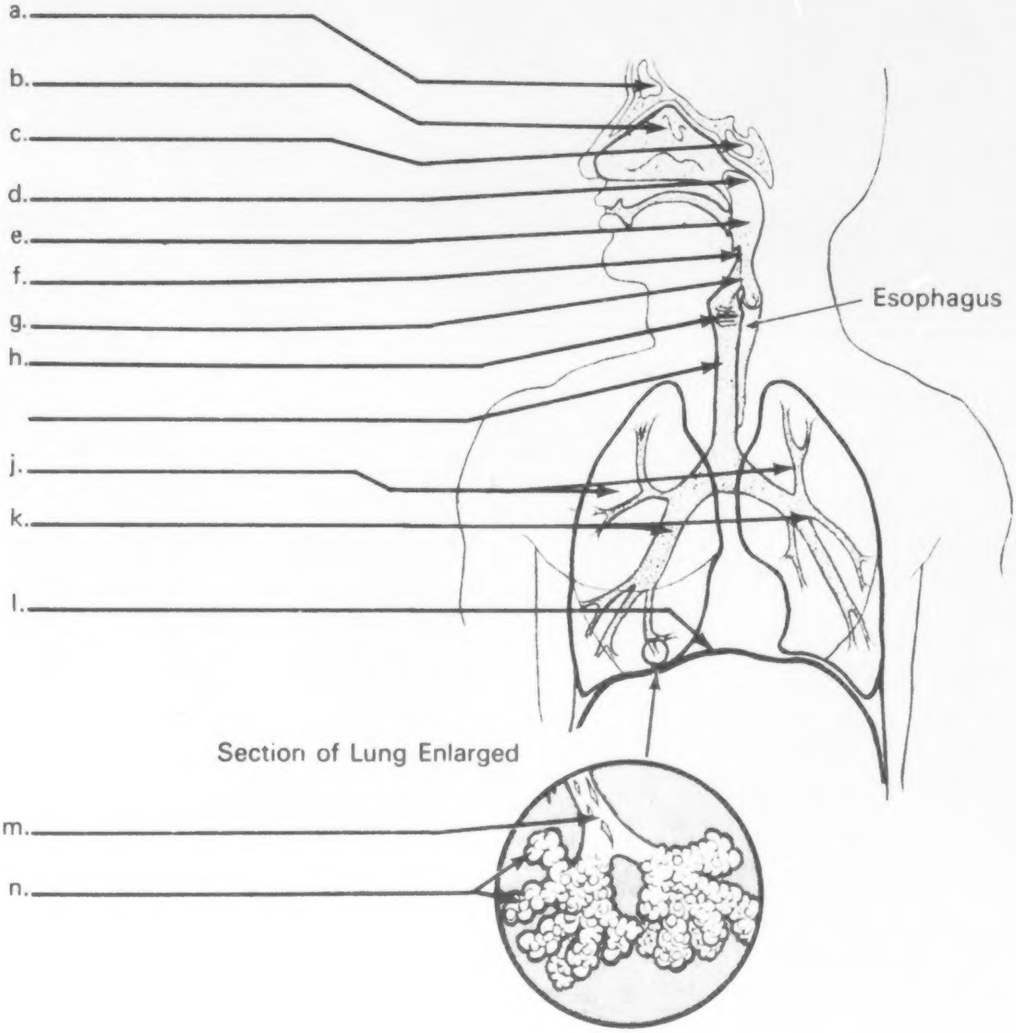
______i. Through the pulmonary semilunar valve

______j. Through capillaries in lungs

______k. Through the bicuspid (mitral) valve

______l. Through the aortic semilunar valve

7. Identify the parts of the respiratory system by writing the correct names in the blanks provided.


a.
b.
c.
d.
e.
f.
g.
h.
j.
k.
l.
Esophagus
Section of Lung Enlarged
m.
n.

Bronchi

Epiglottis

Sphenoidal sinus

Alveoli

Laryngopharynx

Frontal sinus

Lungs

Diaphragm

Larynx

Nasal Cavity

Oropharynx

Nasopharynx

Bronchiole

Trachea

8. Match main parts of respiratory system to their correct functions by writing the correct numbers in the blanks provided.

______a. Conducts air to and from lungs

______b. Air passes into alveoli

______c. Passageway for food, fluids, and air

______d. Aids sense of smell

______e. Eustachian tubes equalize pressure in middle ear

______f. Remove foreign bodies by trapping them on surface of mucous membrane

______g. Alveoli are the functional units

______h. Moisten and warm air before it reaches lungs

______i. Adenoids and tonsils serve as filters

______j. Alveoli enables blood and air to come close enough together to allow gaseous exchange

1. Nasal cavities
2. Pharynx and pharyngeal structures
3. Trachea
4. Lungs

9. Describe the structure of the nasal cavity.

____

____

____

____

10. Trace the path of blood through the heart.

11. Read Fahrenheit thermometers.

12. Record temperature and blood pressure.

13. Demonstrate the ability to:
    a. Take oral temperature.
    b. Take pulse and respirations.
    c. Clean thermometers.
    d. Take blood pressure.

(NOTE: If activities 10-13 have not been finished before the test, ask your instructor when they should be completed.)

CIRCULATORY AND RESPIRATORY SYSTEMS
UNIT II

ANSWERS TO TEST

1. a. 1
   b. 3
   c. 2
   d. 8
   e. 12
   f. 10
   g. 9
   h. 6
   i. 13
   j. 5
   k. 11
   l. 4
   m. 7
2. a. 2
   b. 4
   c. 3
   d. 1
3. a. 2
   b. 3
   c. 3
   d. 1
   e. 3
   f. 2
   g. 3
   h. 1
   i. 2
   j. 1

4. a. External carotid
   b. Maxillary lingual
   c. Facial
   d. Infraorbital
   e. Descending palatine
   f. Posterior superior alveolar
   g. Inferior alveolar
   h. Internal carotid
   i. Common carotid
5. a. External jugular
   b. Internal jugular
   c. Common facial
   d. Posterior facial (retromandibular)
   e. Inferior alveolar
   f. Maxillary
   g. Pterygoid venous plexus
   h. Lingual
   i. Anterior facial
   j. Mental
   k. Posterior superior alveolar
   l. Angular
   m. Infraorbital
   n. Cavernous dural sinus
6. a. 10
   b. 8
   c. 5
   d. 3
   e. 1
   f. 7
   g. 2
   h. 12
   i. 4
   j. 6
   k. 9
   l. 11

7. a. Frontal sinus
   b. Nasal cavity
   c. Sphenoidal sinus
   d. Nasopharynx
   e. Oropharynx
   f. Epiglottis
   g. Laryngopharynx
   h. Larynx
   i. Trachea
   j. Lungs
   k. Bronchi
   l. Diaphragm
   m. Bronchiole
   n. Alveoli

8. a. 3
   b. 4
   c. 2
   d. 1
   e. 2
   f. 1
   g. 4
   h. 1
   i. 2
   j. 4

9. Description should include:
   a. Nasal cavities separated by partition (nasal septum)
   b. Three small bones, the turbinates, project into each nasal cavity
   c. Nasal cavities are lined with mucous membrane

10. Evaluated to the satisfaction of instructor

11. Evaluated to the satisfaction of instructor

12. Evaluated to the satisfaction of instructor

13. Performance skills evaluated to satisfaction of instructor

SENSES, NERVES, AND ANESTHESIA
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to assist with administration of local anesthesia and oxygen, and care for anesthesia equipment properly. This knowledge will be evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 100% accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with senses, nerves, and anesthesia to the correct definitions.
2. List the special senses and their structure.
3. Discuss functions of nerves.
4. Distinguish between motor and sensory nerves.
5. Complete a chart of the names, numbers and specific functions of cranial nerves.
6. Match main branches of the trigeminal nerves to the correct functions.
7. Identify branches of the trigeminal nerve in the mandibular division.
8. Identify branches of the trigeminal nerve in the maxillary division.
9. Name types of topical anesthesia.
10. Distinguish between block and infiltration anesthesia.
11. Select the appropriate needle for area of performance.
12. Discuss effects of anesthesia on the nervous system.
13. Select from a list the most common types of local anesthesia used in the dental offices.
14. Complete a chart on anesthesia reactions, symptoms and treatment.
15. List symptoms of fainting.
16. Check condition of anesthetic cartridges.

17. Demonstrate the ability to:
    a. Locate the taste buds on the tongue.
    b. Prepare an anesthetic syringe.
    c. Assist in administration of local anesthesia.
    d. Assist with patient who has fainted.
    e. Prepare an oxygen cylinder for use.
    f. Prepare a piped-in oxygen unit for administration.
    g. Use an oxygen mask.

SENSES, NERVES AND ANESTHESIA
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activites for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information, assignment, and job sheets.

   C. Order film.

   D. Make transparencies.

   E. Discuss unit and specific objectives.

   F. Invite resource person to speak to class on anesthesia.

      Examples: Anesthesiologist, dentist

   G. Teach student this rhyme as an aide in remembering the cranial nerves:

      "On old olympis tower top a Finn and German viewed some hops"

      (NOTE: The first letter of each word in this rhyme is the beginning letter of a cranial nerve.)

      Example: On-olfactory, old-optic, olympis-oculomotor, tower-trochlear, top-trigeminal

   H. Demonstrate proper breaking and disposal of the used needle.

      (NOTE: Use empty needle holder to fill with water and freeze for testing the vitality of a tooth later.)

   I. Demonstrate technique for crushing an ammonia inhalant.

      Example: Wrapping 2 x 2 gauze around ampule

   J. Teach student needle design.

      Example: Needle gauge: Numbers 25, 27, 30. The larger the number, the smaller the diameter of the needle

   K. Provide equipment for Assignment Sheets #1 and #2.

   L. Damage some cartridges as examples for Assignment Sheet #1.

   M. Provide equipment for Job Sheets #1 through #6.

   N. Discuss and demonstrate procedures for Job Sheets #1 through #6.

   O. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters

1. TM 1--Cranial Nerves
2. TM 2--The Trigeminal Nerves
3. TM 3--Block Injection Sites
4. TM 4--Infiltration Injection Sites
5. TM 5--Aspirating Syringe

D. Assignment Sheet #1--Check Condition of Anesthetic Cartridges

E. Job Sheets

1. Job Sheet #1--Locate the Taste Buds on the Tongue
2. Job Sheet #2--Prepare An Anesthetic Syringe
3. Job Sheet #3--Assist in Administration of Local Anesthetic
4. Job Sheet #4--Assist With Patient Who Has Fainted
5. Job Sheet #5--Prepare an Oxygen Cylinder For Use
6. Job Sheet #6--Prepare a Piped-in Oxygen Unit for Administration
7. Job Sheet #7--Use an Oxygen Mask

III. References:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia, Pennsylvania: W. B. Saunders Co., 1976.

B. Thomas, Virginia E. *Life Sciences for Health Technologies.* Huntington Beach, California: Technicourse Inc., 1970.

C. Rogers, Helen. *Nursing I.* Stillwater, Oklahoma; Curriculum and Instructional Materials Center/State Department of Vocational and Technical Education, 1974.

IV. Additional references:

A. Film--"Human Body: The Nervous System." Available from Oklahoma State Department of Health, N. E. 10th Street and Stonewall, Oklahoma City, OK 73152

B. Filmstrip--"The Special Senses." Available from Robert J. Brady Company, A Prentice Hall Co., Bowie, MD 20715

SENSES, NERVES, AND ANESTHESIA
UNIT III

INFORMATION SHEET

I. Terms and definitions

   A. Sense--General faculty by which conditions outside or inside of body are perceived

   B. Malleus--Hammer-shaped bone of middle ear

   C. Stapes--Stirrup-shaped bone of middle ear

   D. Auditory--Pertaining to sense of hearing

   E. Equilibrium--Normal orientation of the body with respect to its environment

   F. Dermatitis--Inflammation of the skin

   G. Tactile--Pertaining to touch

   H. Nerve--Bundle of nerve fibers, blood vessels, and connecting tissue outside of central nervous system

   I. Anesthetic-Drug which produces local or general loss of sensation and sometimes loss of consciousness

   J. Anesthesia--Loss of sensation

   K. Vasoconstrictor--Causes constriction of blood vessels

   L. Extrinsic asthma--Caused by an allergy to drugs or offending allergens in the air

   M. Anaphylaxis--Unusual reaction of organism to foreign protein

   N. Antishistamine--Used to relieve symptoms of an allergic reaction by counteracting the effect of histamine

   O. Epinephrine--Used as an emergency heart stimulant and to relieve allergy symptoms

   Examples: Hives, asthma

II. Special senses and their structure

   A. Visual--Eye

   B. Hearing--Ear

   (NOTE: Malocclusion can affect the ears through the temporomandibular joint.)

   Examples: Ill-fitting dentures, overbite, overjet

INFORMATION SHEET

C. Taste--Tongue

D. Smell--Upper nasal cavity

(NOTE: An abcessed tooth or excessive bacteria in the mouth due to poor oral hygiene can often affect the sense of smell.)

E. Touch--Skin

(NOTE: The sense of touch is a very complex one, which includes pressure, cold, heat, and pain and the changes in those sensations. There are three to four times as many pain points than all the other tactile points.)

III. Functions of nerves

A. Carry messages from sense organs to the central nervous system

B. Carry messages from central nervous system back to muscles and glands which translate message into action

(NOTE: When the perception of this message is interfered with by some chemical means, the individual is anesthetized.)

IV. Motor and sensory nerves

A. Motor--Control the function of muscle fibers

B. Sensory--Carry messages to brain from their sensory endings

Example: The apex (end or tip) of a tooth

V. Names and specific functions of the cranial nerves (Transparency 1)

Name	**Number**	**Functions**
Olfactory	I	Sense of smell
Optic	II	Sense of sight
Oculomotor	III	Movement of the eye
Trochlear	IV	Movement of the eye muscle
Trigeminal	V	Movement of eye, taste, mastication, secretion, and touch
Abducens	VI	Movement of the eye
Facial	VII	Supplies facial muscles, middle ear, taste

INFORMATION SHEET

Name	Number	Functions
Acoustic (NOTE: This is also called auditory.)	VIII	Sense of hearing and equilibrium
Glossopharyngeal	IX	Taste, movement of pharyngeal muscles, sensation of mucous membrane
Vagus	X	Swallowing, hunger, speech muscles, breathing, heart rate, peristalsis, control of glands in stomach and pancreas
Spinal accessory	XI	Movement of muscles of neck and upper back
Hypoglossal	XII	Movement of tongue muscles

VI. Functions of main branches of the trigeminal nerve

A. Ophthalmic nerve-Divides into three branches which involve the cornea, iris, tear glands, eyelid, eyebrow, and skin of forehead

B. Maxillary nerve-Carries sensation of pain to all maxillary teeth and associated soft-tissue structures

C. Mandibular nerve-Carries sensation of pain to all mandibular teeth and associated soft-tissue structures

(NOTE: Nerves are usually named after their location.)

Example: Teeth are embedded in alveolar bone. Nerves to these teeth are called alveolar nerves

VII. Branches of trigeminal nerve in the mandibular division (Transparency 2)

A. Buccal

B. Incisive

C. Mental foramen and nerves

D. Inferior alveolar

E. Lingual

INFORMATION SHEET

VIII. Branches of the trigeminal nerve in the maxillary division (Transparency 2)

A. Infraorbital

B. Nasopalatine

C. Anterior superior alveolar

D. Middle superior alveolar

E. Posterior superior alveolar

F. Anterior palatine

IX. Types of topical anesthesia

(NOTE: Topical anesthesia is used before an injection and on ulcerated wounds or injuries. It is also sometimes used before taking impressions to prevent gagging.)

A. Spray

B. Liquid

C. Ointment

X. Block and infiltration anesthesia (Transparency 5)

A. Block--Insertion of solution into nerve trunk

Example: Branch of the inferior alveolar nerve near the mandibular foramen

B. Infiltration--Insertion of solution directly into tissue

Example: Gingival tissue for deep periodontal scaling

XI. Appropriate needle selection for area of performance

(NOTE: While these are standard choices, selection can vary due to unusual situations.)

A. Block (long needle)

Examples: Restorations, gingivectomy, extraction, pulpotomy, pulpectomy

1. Maxillary molars
2. Mandibular molars

INFORMATION SHEET

3. Mandibular bicuspids

(NOTE: A block injection is used for most surgical procedures.)

B. Infiltration (short needle) (Transparency 4)

1. Maxillary bicuspids
2. Maxillary cuspids
3. Maxillary incisors
4. Mandibular cuspids
5. Mandibular incisors

(NOTE: Infiltration injections are used to anesthetize the above teeth, with the exception of deep periodontal scaling or prophy in the posterior area. Then a short needle will be requested by the dentist.)

XII. Effects of anesthesia on the nervous system

A. Prevents conduction of impulses along sensory nerves to brain

B. Sets up chemical reaction in the injection site to prevent further impulses

(NOTE: This chemical reaction is accomplished by salt passing over the membranes of the injected site.)

C. Decreases the promotability of membranes

(NOTE: Anesthesia is carried away the blood circulation in the area anesthetized.)

XIII. Most common types of local anesthesia used in dental offices

(NOTE: Some of the following local anesthetics contain vasoconstrictors, which slow the circulatory uptake and transport of anesthesia. On occasion, the dentist may use one without a vasconstrictor due to the physical condition of the patient.)

A. Lidocaine

B. Mepivacaine

C. Epinephrine

D. Phenylephrine

(CAUTION: The color of the stopper on an anesthetic cartridge used to indicate if the anesthetic contained a vasoconstrictor, but this is no longer true.)

INFORMATION SHEET

XIV. Anesthesia reactions, symptoms and treatment

Reaction	Symptoms	Treatment
Allergy	Sneezing, runny nose, weakness followed by convulsions	Antihistamine Example: Benadryl
Dermatitis	Swelling (edema), rash, large welts, itching	Antihistamine Example: Benadryl
Extrinsic asthma	Choking, nausea, coughing, blue color (cyanosis)	Antihistamine Example: Benadryl
Anaphylactic shock	Sneezing, edema, itching at the site of the injection, fainting	Antihistamine Example: Benadryl

(NOTE: The assistant will prepare the sterile syringe, know all of the medications in the emergency kit, and phone the family physician immediately.)

XV. Symptoms of fainting (syncope)

(NOTE: Syncope is pronounced sing'-ko-pe.)

A. Dizziness

B. Pallor

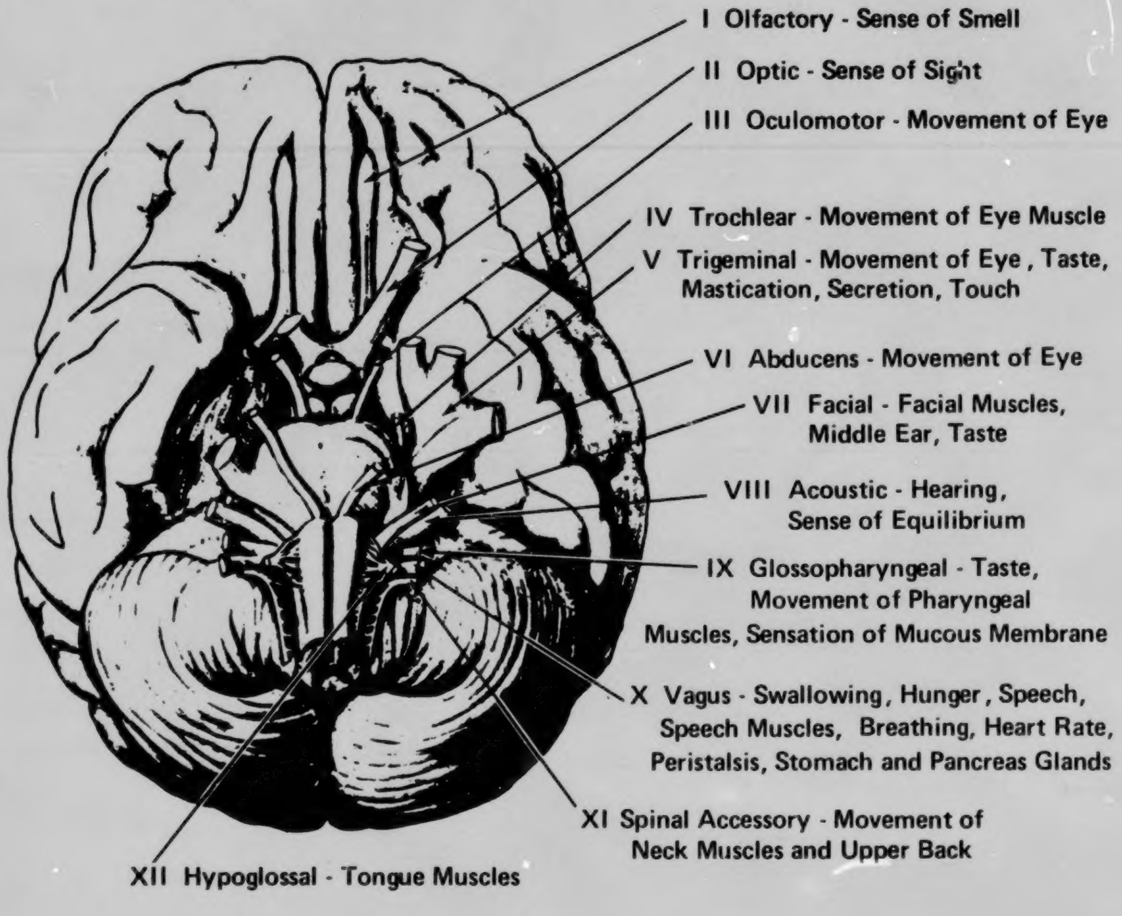
C. Nausea

D. Perspiration

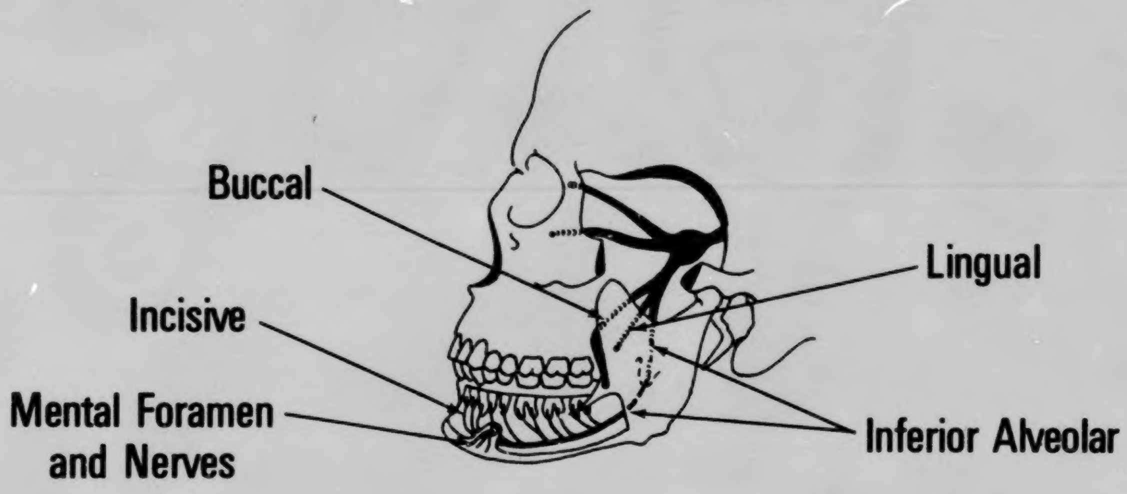
E. Semiconsciousness to unconsciousness

(NOTE: Not all patients who faint will have all of these symptoms at the same time.)

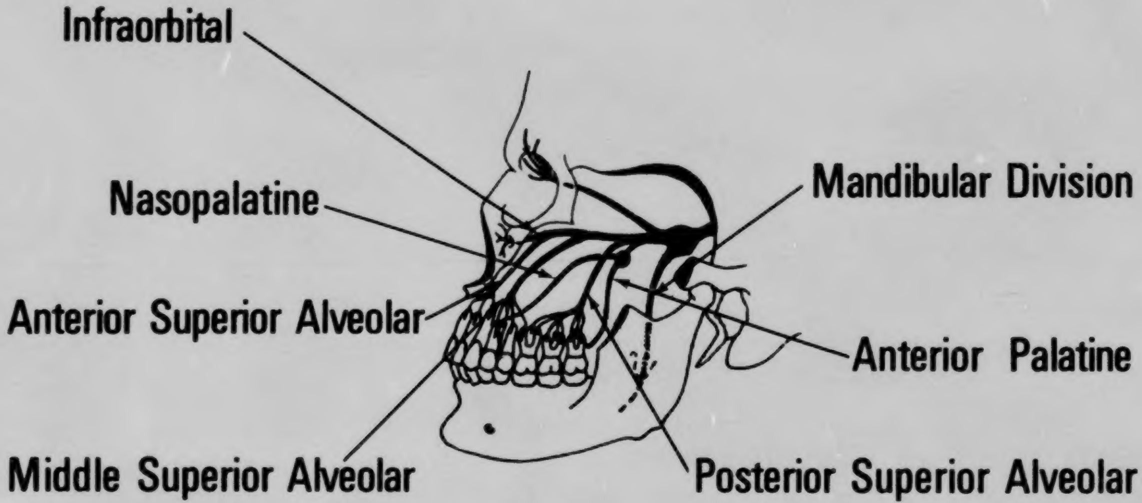
Cranial Nerves


I Olfactory - Sense of Smell
II Optic - Sense of Sight
III Oculomotor - Movement of Eye
IV Trochlear - Movement of Eye Muscle
V Trigeminal - Movement of Eye, Taste, Mastication, Secretion, Touch
VI Abducens - Movement of Eye
VII Facial - Facial Muscles, Middle Ear, Taste
VIII Acoustic - Hearing, Sense of Equilibrium
IX Glossopharyngeal - Taste, Movement of Pharyngeal Muscles, Sensation of Mucous Membrane
X Vagus - Swallowing, Hunger, Speech, Speech Muscles, Breathing, Heart Rate, Peristalsis, Stomach and Pancreas Glands
XI Spinal Accessory - Movement of Neck Muscles and Upper Back
XII Hypoglossal - Tongue Muscles

The Trigeminal Nerves


Buccal
Lingual
Incisive
Mental Foramen and Nerves
Inferior Alveolar

Mandibular Innervation


Infraorbital
Nasopalatine
Mandibular Division
Anterior Superior Alveolar
Anterior Palatine
Middle Superior Alveolar
Posterior Superior Alveolar

Maxillary Innervation

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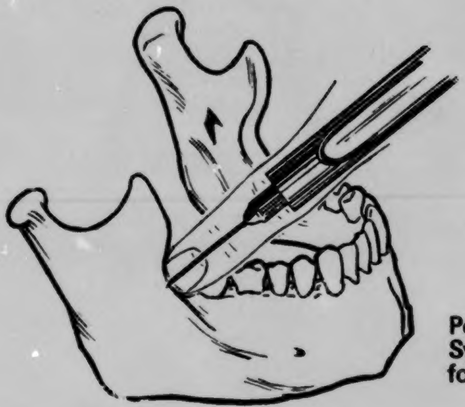
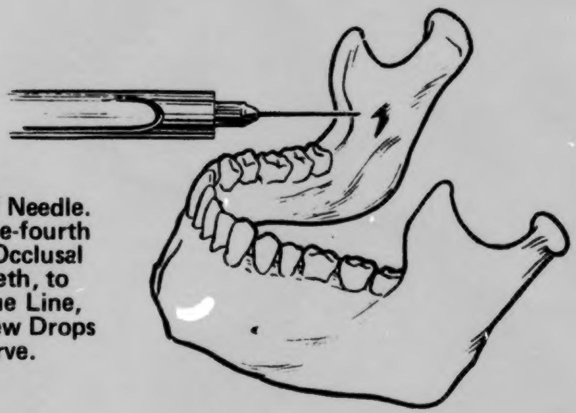
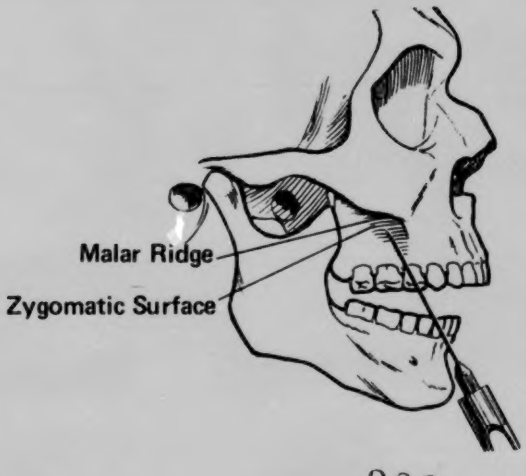
Block Injection Sites



Position of Finger and Syringe for Insertion for Long Buccal.

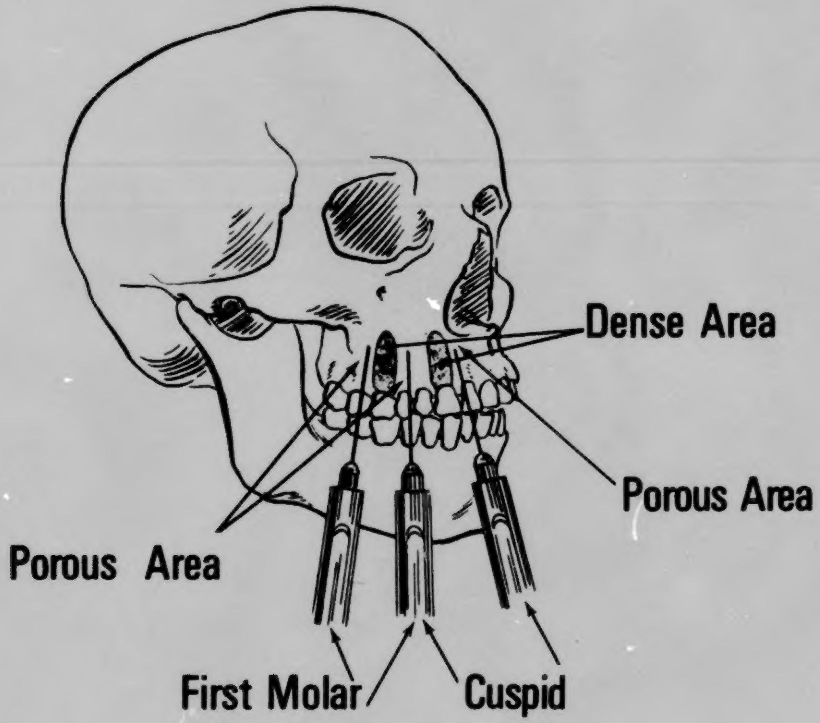


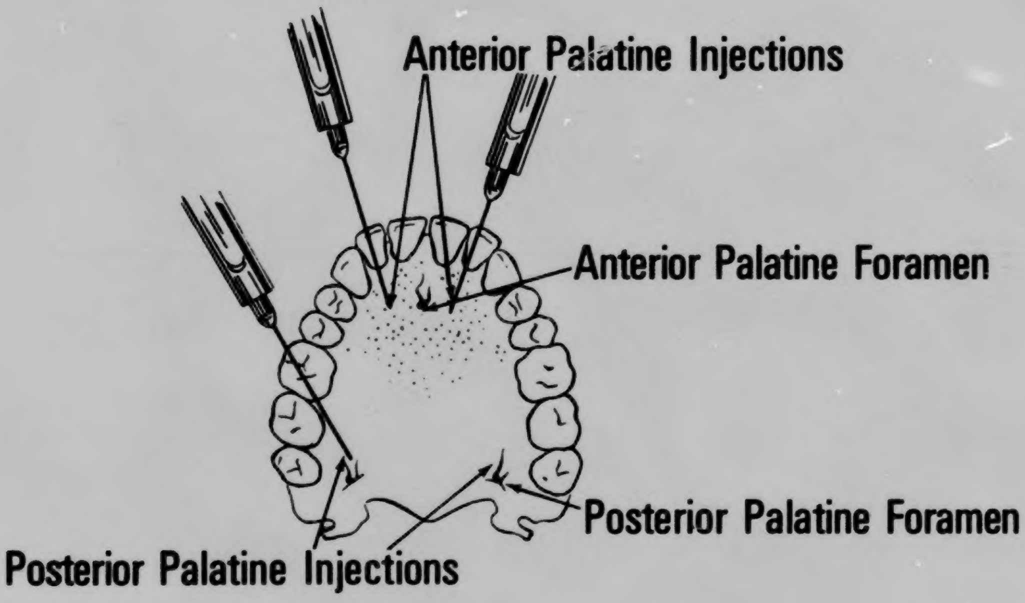
Second Position of Needle. Inserted About One-fourth Inch in Line with Occlusal Plane of Lower Teeth, to the Internal Oblique Line, There Deposit a Few Drops for the Lingual Nerve.



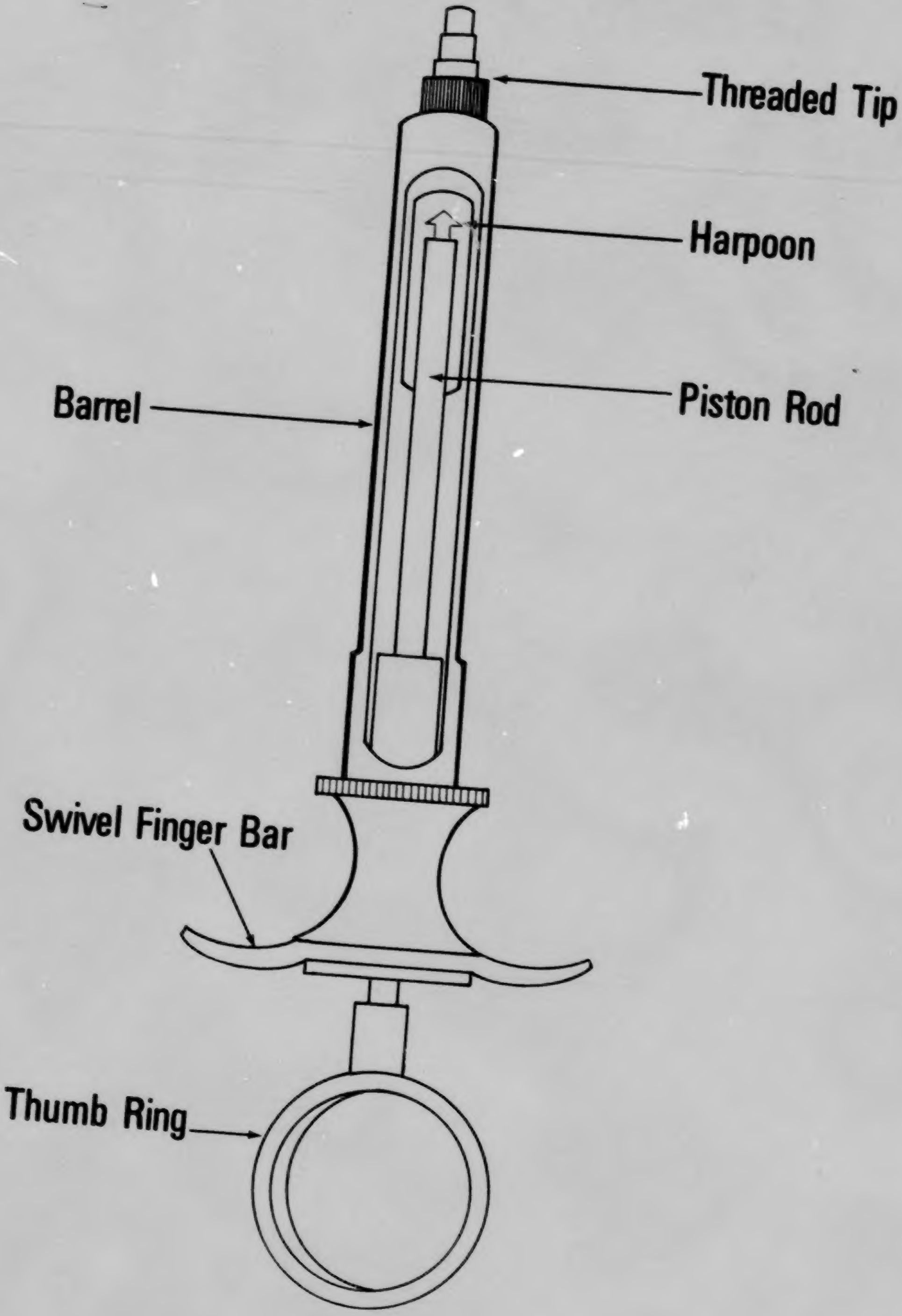
Correct Position for Syringe and Needle for Zygomatic or Tuberosity Injection.

Infiltration Injection Sites


Dense Area
Porous Area
Porous Area
First Molar
Cuspid


Anterior Palatine Injections
Anterior Palatine Foramen
Posterior Palatine Foramen
Posterior Palatine Injections

Aspirating Syringe


Threaded Tip
Harpoon
Barrel
Piston Rod
Swivel Finger Bar
Thumb Ring

SENSES, NERVES, AND ANESTHESIA
UNIT III

ASSIGNMENT SHEET #1--CHECK CONDITION OF ANESTHETIC CARTRIDGES

NAME ______________________________ SCORE ____________________

Anesthetic cartridges can be damaged in shipment by rough handling, freezing temperatures, or by using the wrong kind of disinfectant solution. It is the dental assistant's responsibility to prevent cartridge problems. Proper care of cartridges will improve your effectiveness in the dental office and add to the patient's safety.

Using the chart below, check the condition of cartridges and mark each step as you complete it.

	Discard	Good
1. Look for rust on the cartridge (NOTE: Moisture can get into tin and cause rust. If this happens, discard cartridge.)		
2. Observe condition of plunger Example: Extruded plunger and no bubble (NOTE: This means plunger has been frozen or in disinfecting solution too long. Discard cartridge.)		
3. Notice condition of caps (NOTE: Use only 91% isopropyl alcohol or 70% ethyl alcohol. Corroded caps should not be used.)		
4. Observe bubbles (NOTE: Small bubbles 1 to 2 millimeters may be formed from gases in solution, and are harmless. But large bubbles which have extruded beyond end are result of freezing. Discard cartridge.)		
5. Observe leakage before injection (NOTE: An off-center perforation produces an oval-shaped puncture which allows leakage during injection.) (CAUTION: Cartridges should not be autoclaved or stored at temperatures 104° F or above for more than 48 hours. Excessive heat breaks down the epinephrine. Rubbing alcohol or quarternary solution should never be used for disinfecting rubber stoppers.)		

ASSIGNMENT SHEET #1

Review your care of cartridges by listing factors most likely to cause the following:

1. Rust on the cartridge____

   ____

2. Extruded plunger and no bubble________________________________

   ____

3. Corroded caps____

   ____

4. Large bubble extruded beyond end______________________________

   ____

5. Leakage during injection_____________________________________

   ____

SENSES, NERVES, AND ANESTHESIA
UNIT III

JOB SHEET #1--LOCATE THE TASTE BUDS ON THE TONGUE

I. Equipment

   A. Paper towels

   B. Toothpicks

   C. Salt, 1 teaspoon

   D. Sugar, 1 teaspoon

   E. Vinegar, 1 teaspoon

   F. Aspirin, 1

II. Procedure

   A. Prepare separate solutions of salt, sugar, vinegar, and aspirin in about 1/2 cup of water

   (NOTE: These solutions will be used to test for salty, sweet, sour, and bitter tastes.)

   B. Wipe your tongue dry with a paper towel

   C. Have your partner dip a toothpick in one of the solutions and place a drop of the solution on:

      1. The tip of your tongue

      2. Each side of your tongue

      3. The back of your tongue

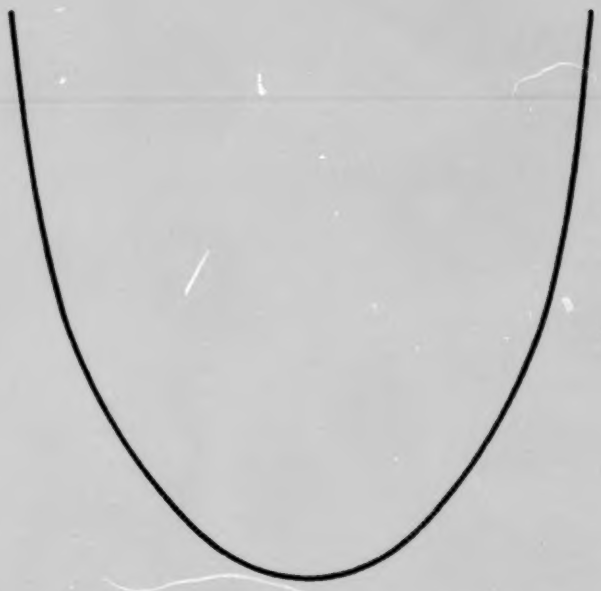
   D. Write the name (salt, for example) in the proper place in Figure 1 if you taste the substance in one of these areas

   E. Wipe your tongue and test another solution

   (NOTE: Use a different toothpick for each solution.)

JOB SHEET #1

F. Record the results (Figure 1)



G. Compare your data with other classmates

H. State where most students tasted

1. Sweet
2. Sour
3. Salt
4. Bitter

Were there any exceptions?

(NOTE: If your taste receptors can respond to only these four types of stimuli, how can you account for the wide range of "tastes" associated with a good meal?)

SENSES, NERVES AND ANESTHESIA
UNIT III

JOB SHEET #2--PREPARE AN ANESTHETIC SYRINGE

I. Equipment

- A. Anesthetic cartridge
- B. Anesthetic syringe
- C. Gauze and alcohol (70% ethyl)
- D. Disposable needle

II. Procedure

- A. Wash hands
- B. Select syringe

  (NOTE: Procedures in this job sheet are for an aspirating syringe.)

- C. Select cartridge

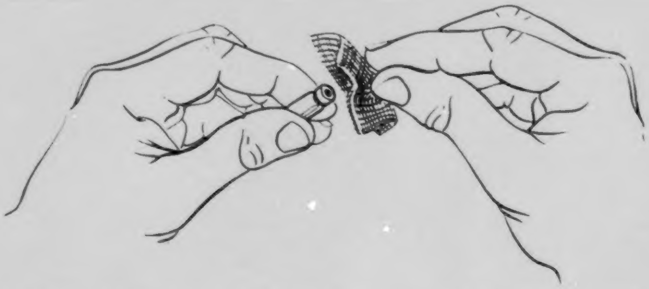
  (NOTE: Most doctors will have a preference for brand and epinephrine content.)

- D. Disinfect cartridge
  1. Review patient's chart

     (CAUTION: ASK FIRST if patient has a history of anesthetic allergy, cardiovascular disease, or high blood pressure. If answer is yes, notify doctor.)

  2. Wipe top of cartridge with gauze dipped in alcohol (Figure 1)

FIGURE 1



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JOB SHEET #2

E. Load cartridge into syringe (Figure 2)

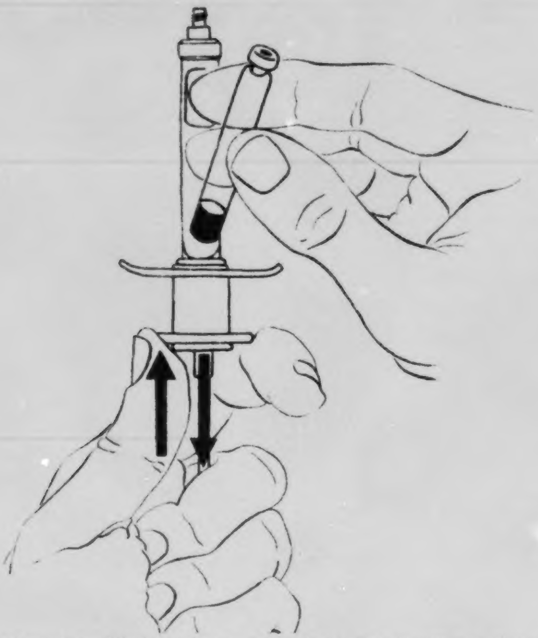


FIGURE 2

Used with permission of Colwell Systems, Inc. from *The Auxiliary's Role in the Administration of Local Anesthesia,* copyright 1974, p. 27.

1. Hold syringe in left hand
2. Push thumb against finger bar and pull plunger down with 2nd and 3rd fingers
3. Insert cartridge with rubber stopper end toward plunger; guide into position
4. Release plunger gently
5. Use right hand to apply pressure on end of syringe; an alternate technique is to apply a quick slapping motion on end of syringe

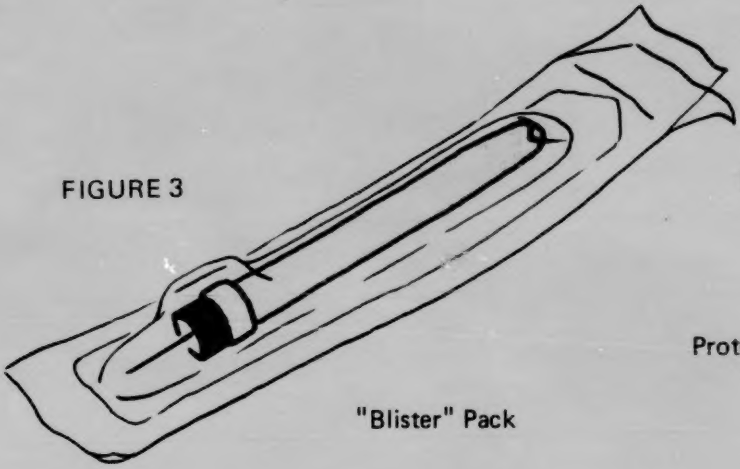
   (NOTE: This is called engaging the harpoon. Check to see if harpoon is in place by pulling back on plunger; if it feels free, apply more pressure until harpoon is hooked into rubber stopper.)

F. Prepare disposable needle (Figures 3 and 4)

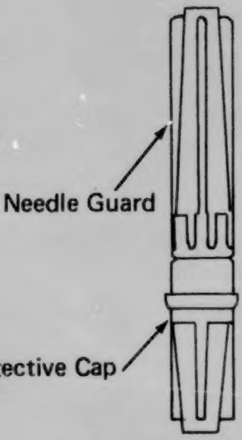
(NOTE: A long needle [1 5/8"] is used for a posterior maxillary or mandibular block injection, and a short needle [1"] is used for a maxillary or mandibular anterior infiltration injection. NEVER say in front of a patient, "Doctor, do you want a long or short needle?" Instead say, "Doctor, are you anesthetizing the anterior or the posterior?")

JOB SHEET #2

FIGURE 3



"Blister" Pack



Disposable Needle Pack

FIGURE 4

Used with permission of Colwell Systems, Inc. from *The Auxiliary's Role in the Administration of Local Anesthesia*, copyright 1974, p. 19.

1. Blister pack
   a. Grasp and pull to half open (Figure 5)

      (NOTE: The package will say pull apart at the appropriate place.)

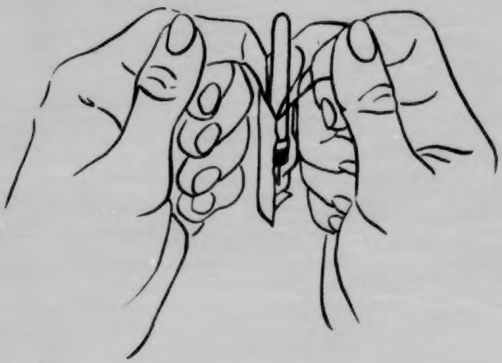


FIGURE 5

Used with permission of Colwell Systems, Inc. from *The Auxiliary's Role in the Administration of Local Anesthesia*, copyright 1974, p. 21.

JOB SHEET #2

b. Put thumb and finger on needle guard and hold firmly as you finish opening pack (Figure 6)

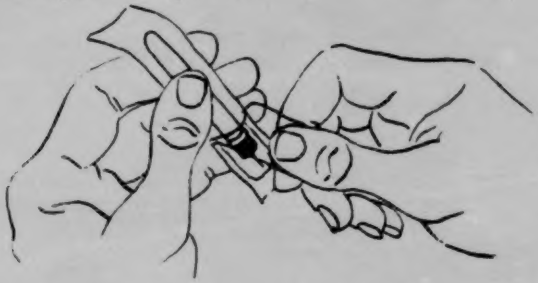


FIGURE 6

Used with permission of Colwell Systems, Inc. from *The Auxiliary's Role in the Administration of Local Anesthesia*, copyright 1974, p. 21.

(NOTE: If you tear open blister pack in one movement, needle may drop and become contaminated. If this happens needle must be discarded.)

c. Leave needle guard in place

2. Disposable needle pack (See Figure 4)

   a. Remove protective cap

   b. Leave needle guard in place

G. Attach disposable needle

1. Slide exposed cartridge end of needle through threaded tip of needle
2. Apply firm pressure until needle punctures rubber diaphragm of cartridge
3. Turn needle until hub is firmly threaded into position

   (NOTE: The syringe is now ready. Leave needle guard on until ready for use

4. Place in reach of doctor
5. KEEP SYRINGE OUT OF SIGHT OF PATIENT

SENSES, NERVES AND ANESTHESIA
UNIT III

JOB SHEET #3--ASSIST IN ADMINISTRATION OF LOCAL ANESTHETIC

I. Equipment:

   A. Topical anesthetic agent

   B. Cotton swab

   C. Mouth mirror

   D. Cartridges of local anesthetic

   E. Sterile anesthetic syringe

   F. Sterile needle (disposable)

II. Procedure

(NOTE: Do not display any operative instruments or syringe in front of patient. Place a napkin or towel over tray.)

   A. Instruct patient that numbing sensation in the area is normal, and that the numbness will last about two hours

   B. Prepare swab with topical anesthetic and pass it to the dentist or expanded function auxiliary

   C. Position needle with bevel side toward the teeth and direct the entire syringe toward the path of insertion

   D. Adjust handle end (finger knob or ring control) to proper position

   E. Pass syringe and place in a palm grasp position in the doctor's hands

   F. Retract the cheek or lip if necessary

   (NOTE: Try to avoid any sudden reflex action on part of patient while injection is being given and watch patient closely. Do not leave patient alone.)

SENSES, NERVES AND ANESTHESIA
UNIT III

JOB SHEET #4--ASSIST WITH PATIENT WHO HAS FAINTED

(NOTE: The most frequently experienced complication after an injection is fainting [*syncope.*] It is important that you know how to recognize it and act quickly and calmly. Use a classmate to practice emergency procedures.

I. Equipment

  A. Ammonia inhalant

  B. Oxygen

  C. Cold compresses

II. Procedure

  A. Tilt dental chair so patient's head is as far back as possible

  B. Signal for dentist

  (CAUTION: Do not leave the patient.)

  C. Reassure patient in a calm voice

  D. Crush an ammonia inhalant and hold about 4" below patient's nose

  (NOTE: Treatment will be supervised by the dentist.)

  E. Steps dentist will want you to take:

    1. Administer oxygen

    2. Loosen restrictive clothing

    3. Apply cold compresses to forehead

SENSES, NERVES AND ANESTHESIA
UNIT III

JOB SHEET #5--PREPARE AN OXYGEN CYLINDER FOR USE

I. Equipment

A. Cylinder of oxygen

B. Regulator

C. Wrench

D. Humidifier

E. Tubing

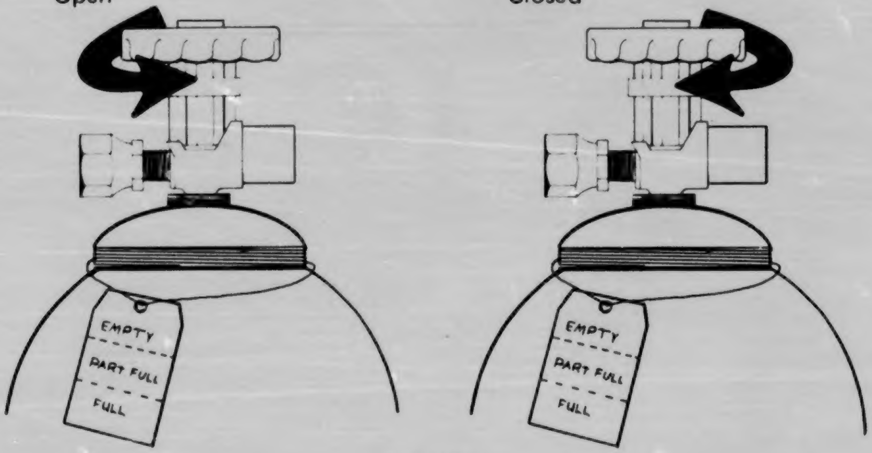
II. Procedure to prepare for use

A. Assemble equipment

B. Remove protective cap from cylinder

C. Open cylinder valve slightly for a very short time (Figure 1)

(NOTE: This is called "cracking" the valve, and it blows out any dust particles which may have collected.)


Open

Closed

FIGURE 1

D. Connect the regulator to the cylinder outlet on the cylinder valve

(NOTE: See Figure 2 on the following page.)

JOB SHEET #5

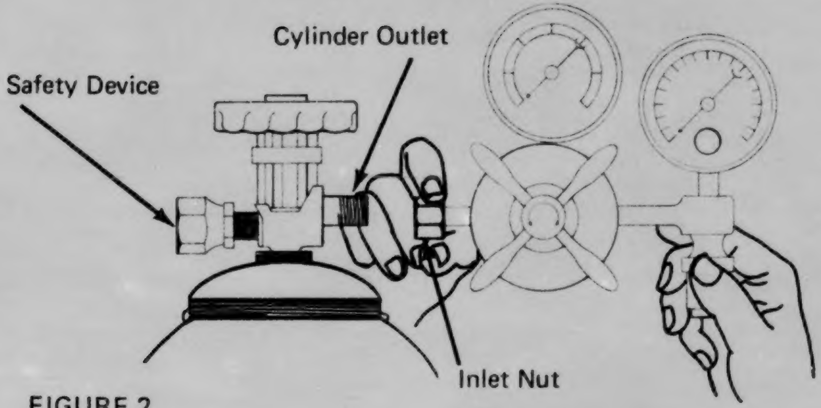

Cylinder Outlet
Safety Device
Inlet Nut

FIGURE 2

E. Tighten the inlet nut with a wrench (Figure 3)

(NOTE: The wrench is usually fastened to the oxygen carrier with a piece of chain.)

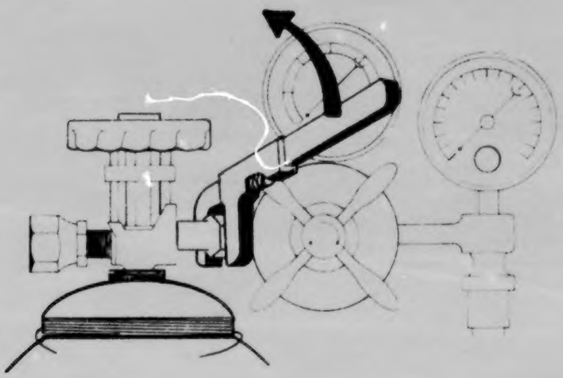
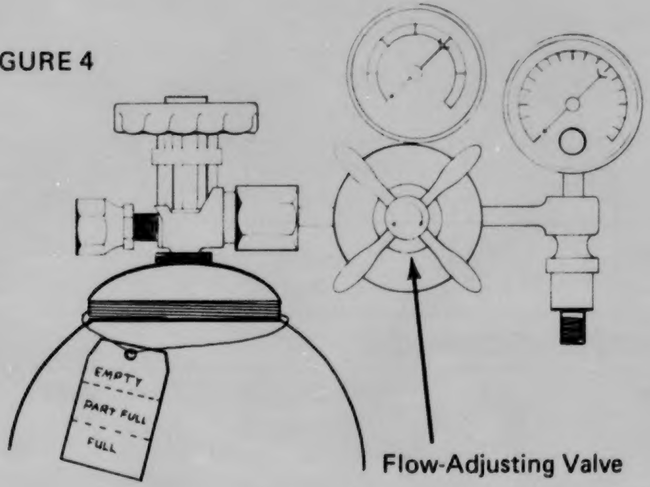


FIGURE 3

JOB SHEET #5

F. Turn the flow-adjusting valve to "OFF" position (Figure 4)

FIGURE 4


EMPTY
PART FULL
FULL
Flow-Adjusting Valve

G. Remove cover from humidifier

H. Fill humidifier with distilled water to the indicated water level

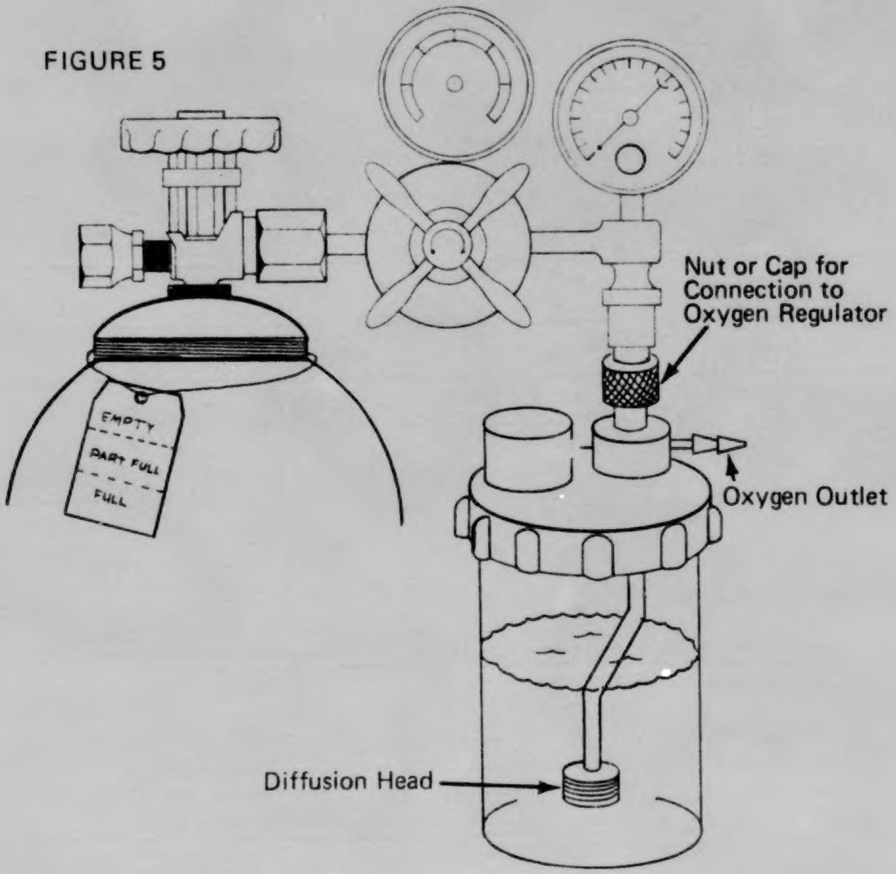
(NOTE: If there is no water level mark, fill the humidifier half full.)

I. Replace cover on humidifier

JOB SHEET #5

J. Attach the humidifier to the regulator (Figure 5)

FIGURE 5

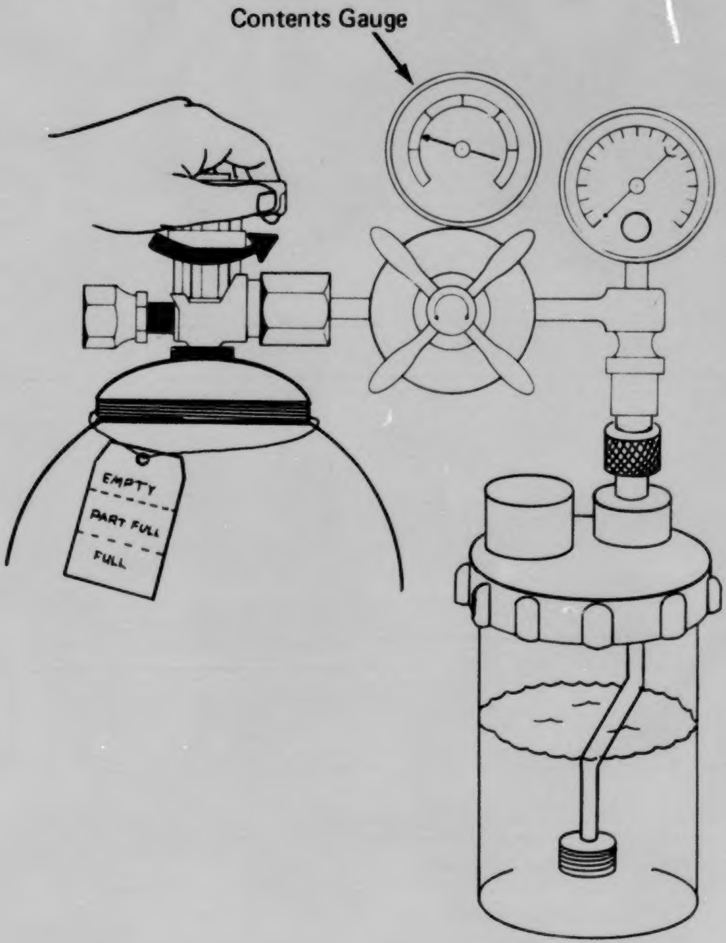

EMPTY
PART FULL
FULL
Nut or Cap for Connection to Oxygen Regulator
Oxygen Outlet
Diffusion Head

K. Attach the tubing to the oxygen outlet

JOB SHEET #5

L. Open the cylinder valve very slowly to avoid damaging the regulator (Figure 6)

FIGURE 6



M. Turn the flow-adjusting valve to the "ON" position

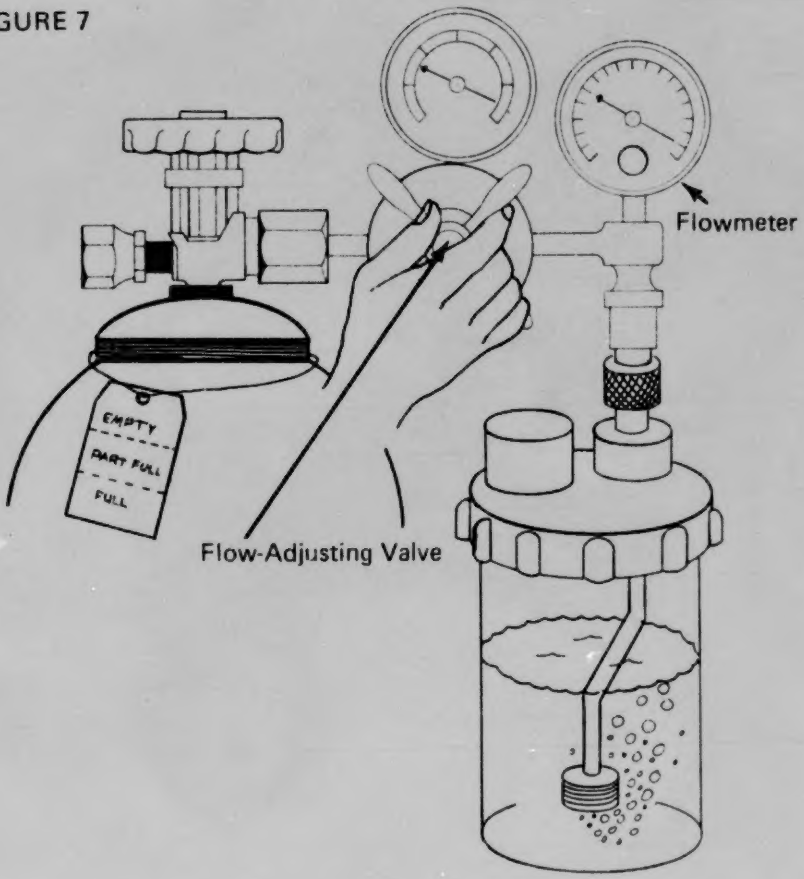
(NOTE: See Figure 7 on the following page.)

N. Continue turning the flow-adjusting valve until the flowmeter registers the prescribed number of liters per minute

(NOTE: The cylinder and regulator are now ready for use.)

JOB SHEET #5

FIGURE 7


Flowmeter
EMPTY
PART FULL
FULL
Flow-Adjusting Valve

III. Procedure to discontinue use

(NOTE: Follow this procedure when oxygen use is to be discontinued for thirty minutes or more and/or when the regulator is to be removed from the cylinder.)

A. Close the cylinder valve tightly

B. Wait until the flowmeter and the cylinder contents gauge have returned to zero

C. Close the flow-adjusting valve

D. Remove humidifier

E. Loosen the inlet nut with the wrench

JOB SHEET #5

F. Remove the regulator

G. Replace the protective cap

H. Clean equipment and return to the proper place

SENSES, NERVES AND ANESTHESIA
UNIT III

JOB SHEET #6--PREPARE A PIPED-IN OXYGEN UNIT FOR ADMINISTRATION

I. Equipment

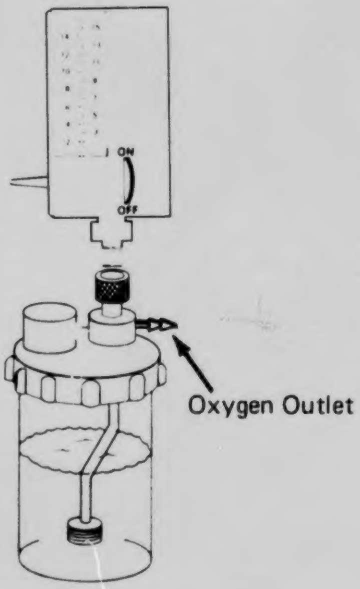
- A. Flowmeter
- B. Humidifier
- C. Tubing

II. Procedure to prepare for use

- A. Assemble equipment
- B. Remove cover on humidifier
- C. Fill humidifier with distilled water to the prescribed level

  (NOTE: If there is no water-level mark, fill the humidifier half full.)
- D. Replace cover on humidifier
- E. Attach humidifier to flowmeter (Figure 1)

FIGURE 1

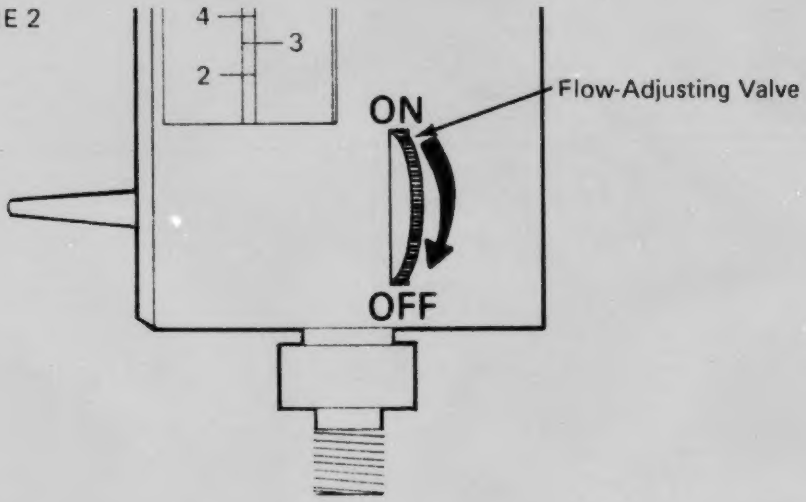


JOB SHEET #6

F. Take equipment to patient's unit

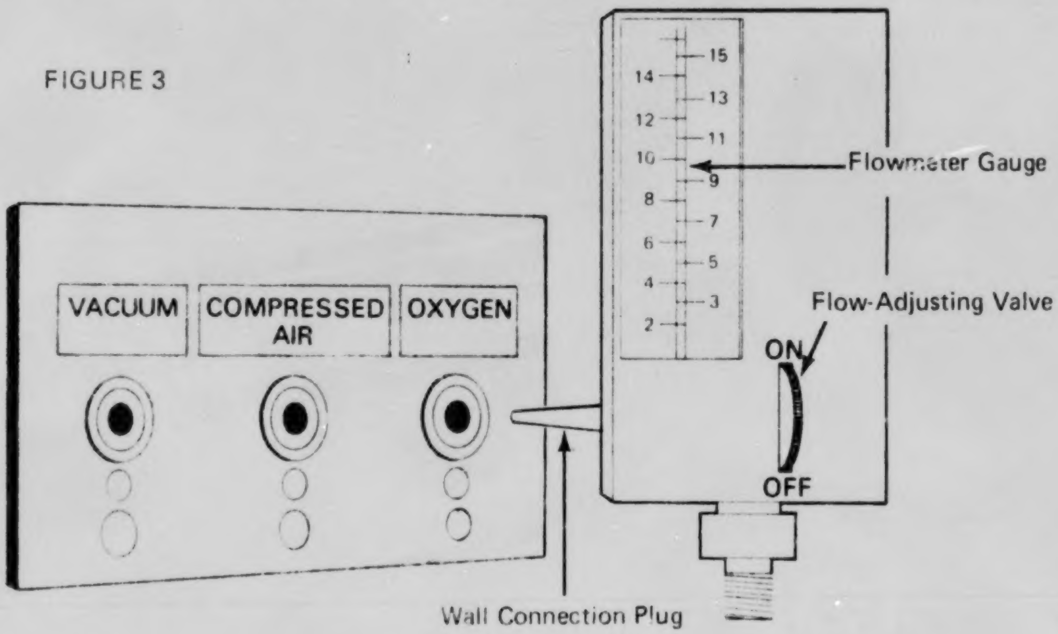
G. Turn the flow-adjusting valve to the "OFF" position (Figure 2)

FIGURE 2


4
3
2
ON
Flow-Adjusting Valve
OFF

H. Insert the flowmeter adapter into the opening of the outlet, pressing firmly to secure until it snaps into place (Figure 3)

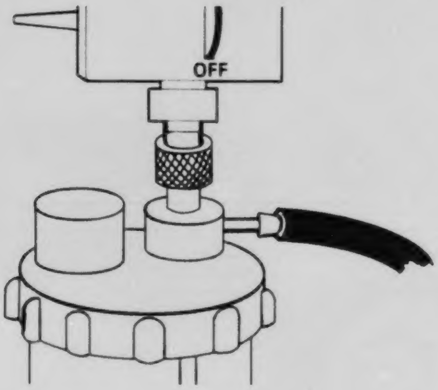
FIGURE 3


15
14
13
12
11
10
9
8
7
6
5
4
3
2
Flowmeter Gauge
VACUUM
COMPRESSED AIR
OXYGEN
Flow-Adjusting Valve
ON
OFF
Wall Connection Plug

JOB SHEET #6

I. Attach the tubing to the oxygen outlet (Figure 4)

FIGURE 4



J. Slowly open the flow-adjusting valve until the desired flow is obtained

(NOTE: The oxygen is now ready for use.)

III. Procedure to discontinue use

A. Turn the flow-adjusting valve to "OFF"

B. Wait until the gauge drops to zero

C. Remove the flowmeter from the outlet by releasing the locking mechanism

D. Clean equipment and return to proper place

SENSES, NERVES AND ANESTHESIA
UNIT III

JOB SHEET #7--USE AN OXYGEN MASK

I. Equipment

- A. Oxygen setup

  (NOTE: Prepare oxygen setup using instructions on Job Sheet #5 or #6.)

- B. Face mask (Figure 1)

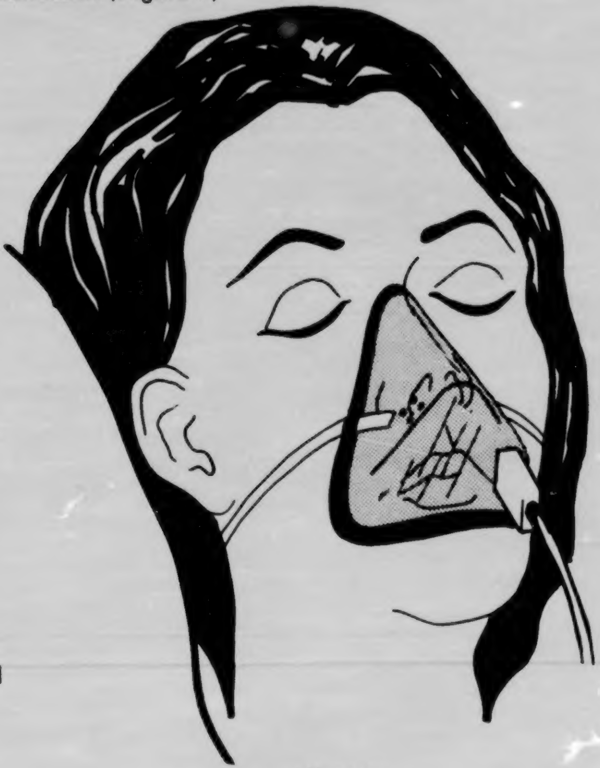


FIGURE 1

II. Procedure

- A. Check dentist's order
- B. Wash hands
- C. Assemble equipment and take to patient's unit
- D. Identify patient and explain procedure

JOB SHEET #7

E. Attach the tubing from the face mask to the oxygen outlet

F. Start the oxygen flow at a high rate, fourteen to fifteen liters per minute

(NOTE: Most patients breathe more deeply and rapidly when the mask is first applied. If the oxygen flow is too low at first, the patient may not be getting enough oxygen.)

G. Adjust the face mask

H. Secure the straps so the mask fits snugly but not tightly enough to hamper circulation

I. Check for leaking of oxygen around the edges of the mask; if necessary, place a piece of dampened gauze or cotton in leaking areas

J. Readjust the rate of flow to the prescribed level

K. Remove the mask every two hours to sponge and dry the patient's face

L. Check frequently for

  1. Position of face mask
  2. Rate of flow of oxygen
  3. Water level in the humidifier
  4. Clear and open tubing
  5. Leaks in connections
  6. Quantity of oxygen remaining in cylinders

M. Record and report

  1. Time
  2. Rate of flow
  3. Patient response

N. Clean equipment and replace as necessary

(NOTE: Because there are many types of oxygen masks, it is the responsibility of each dental assistant to learn about those used in your dental office.)

JOB SHEET #7

O. Discontinue use

    1. Remove mask

    2. Shut off oxygen supply

    3. Clean equipment and return to proper place

P. Record time oxygen is discontinued

SENSES, NERVES AND ANESTHESIA
UNIT III

TEST

NAME ______________________________ SCORE ____________________

1. Match terms associated with senses, nerves, and anesthesia to their definitions by placing the correct numbers in the blanks provided.

______a. Causes constriction of blood vessels

______b. Pertaining to touch

______c. Pertaining to sense of hearing

______d. Used as an emergency heart stimulant and to relieve allergy symptoms

______e. Hammer-shaped bone of middle ear

______f. Drug which produces local or general loss of sensation and sometimes loss of consciousness

______g. Inflammation of the skin

______h. Drug used to relieve symptoms of allergic reaction by counteracting the effect of histamine

______i. Bundle of nerve fibers, blood vessels, and connecting tissue outside of central nervous system

______j. General faculty by which conditions outside or inside of body are perceived

______k. Stirrup-shaped bone of middle ear

______l. Unusual reaction of organism to foreign protein

______m. Caused by an allergy to drugs or offending allergens in air

______n. Loss of sensation

______o. Normal orientation of the body with respect to its environment

1. Sense
2. Malleus
3. Stapes
4. Auditory
5. Equilibrium
6. Dermatitis
7. Tactile
8. Nerve
9. Anesthesia
10. Anesthetic
11. Vasoconstrictor
12. Extrinsic asthma
13. Anaphylaxis
14. Antihistamine
15. Epinephrine

2. List the special senses and their structure.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

3. Discuss functions of nerves.

____

____

____

4. Distinguish between motor and sensory nerves by placing a "M" for motor nerves and "S" for sensory nerves.

_____a. Control function of muscle fibers

_____b. Carry messages to brain from their sensory endings

5. Complete the chart below and on the next page by writing the correct names, numbers and/or specific functions of the cranial nerves.

Name	Number	Functions
Olfactory	I	a.__________
Optic	b.______	Sense of sight
c.__________	III	Movement of the eye
Trochlear	d.______	Movement of the eye muscle
Trigeminal	V	e.__________ __________
Abducens	f.______	Movement of the eye
g.__________	VII	Supplies facial muscles, middle ear, taste
Acoustic	h.______	Sense of hearing and equilibrium
Glossopharyngeal	i.______	Taste, movement of pharyngeal muscles, sensation of mucous membrane

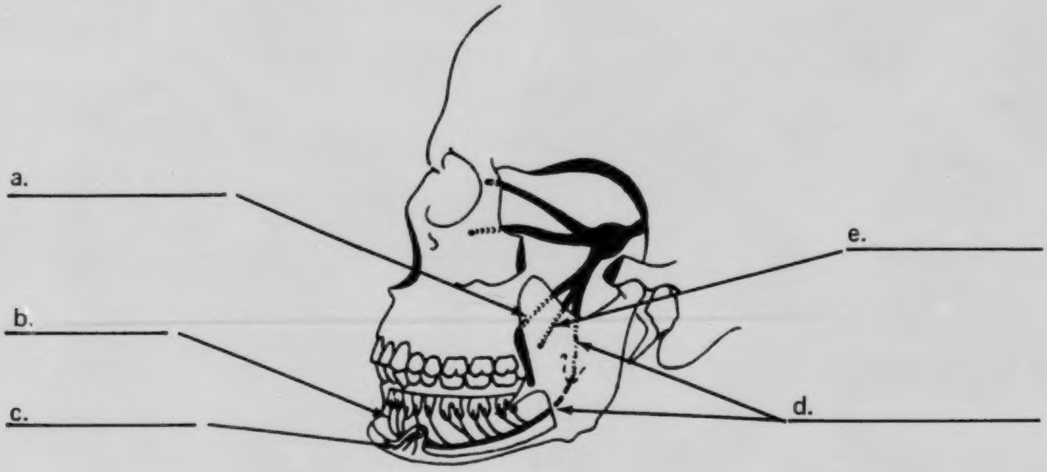
Name	Number	Functions
j.____________	X	Swallowing, hunger, speech muscles, breathing, heart rate, peristalsis, control of glands in stomach and pancreas
k.____________	XI	Movement of muscles of neck and upper back
Hypoglossal	XII	1.____________________________

6. Match the main branches of trigeminal nerve to their functions by placing the correct numbers in the blanks provided.

_____a. Carries sensation of pain to all maxillary teeth and associated soft-tissue structures	1. Ophthalmic nerve
_____b. Divides into three branches which involve the cornea, iris, tear glands, eyelid, eyebrow, and skin of forehead	2. Maxillary nerve
_____c. Carries sensation of pain to all mandibular teeth and associated soft-tissue structures	3. Mandibular nerve

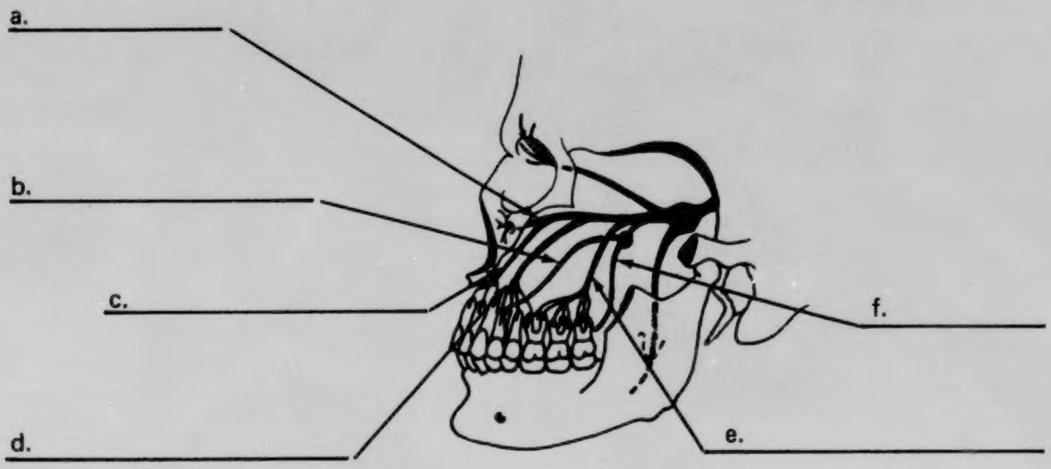
7. Identify branches of the trigeminal nerve in the mandibular division by writing the correct names in the blanks provided.

Inferior alveolar
Lingual
Buccal
Incisive
Mental foramen and nerves



8. Identify branches of the trigeminal nerve in the maxillary division by writing the correct names in the blanks provided.

Anterior palatine	Posterior superior alveolar
Naso palatine	Middle superior alveolar
Anterior superior	
Infraorbital	



9. Name types of topical anesthesia.

10. Distinguish between block and infiltration anesthesia by writing a "B" for block anesthesia and an "I" for infiltration anesthesia.

_____a. Inserting the solution directly into the tissue

_____b. Inserting the solution into the nerve trunk

11. Select the appropriate needle for the area of performance by placing the correct number in the blanks provided.

______a. Maxillary bicuspids
______b. Mandibular molars
______c. Mandibular incisors
______d. Maxillary incisors
______e. Maxillary molars
______f. Maxillary cuspids
______g. Mandibular cuspids
______h. Mandibular bicuspids

1. Block (long needle)
2. Infiltration (short needle)

12. Discuss effects of anesthesia on the nervous system.

____

____

____

____

13. Select from the list below the most common types of local anesthesia used in dental offices. Mark each correct answer with an "X."

______a. Hemostatin
______b. Epinephrine
______c. Phenylephrine
______d. Stypitis
______e. Lidocaine
______f. Mepivacaine

14. Complete the chart below by writing the anesthesia reactions, symptoms, or treatment in the blanks provided.

Reaction	Symptoms	Treatment
a.____________	Sneezing, runny nose, weakness followed by convulsions	Antihistamine
Dermatitis	b.______________ ________________ ________________	Antihistamine
c.____________ ______________	Choking, nausea, coughing, blue color (cyanosis)	Antihistamine
Anaphylactic shock	Sneezing, edema, itching at the site of the injection, fainting	d.____________

15. Select from the list below symptoms of fainting (syncope). Mark each correct answer with an "X."

_____a. Hiccups

_____b. Pallor

_____c. Perspiration

_____d. Nervousness

_____e. Dizziness

_____f. Nausea

_____g. Semiconsciousness to unconsciousness

_____h. Weakness

16. Check the condition of anesthetic cartridges.

17. Demonstrate the ability to:

    a. Locate the taste buds on the tongue.

    b. Prepare an anesthetic syringe.

    c. Assist in administration of local anesthetic.

    d. Assist with patient who has fainted.

    e. Prepare an oxygen cylinder for use.

    f. Prepare a piped-in oxygen unit for administration.

    g. Use an oxygen mask.

(NOTE: If activities 16 and 17 have not been finished before the test, ask your instructor when they should be completed.)

SENSES, NERVES AND ANESTHESIA
UNIT III

ANSWERS TO TEST

1. a. 11
   b. 7
   c. 4
   d. 15
   e. 2
   f. 10
   g. 6
   h. 14
   i. 8
   j. 1
   k. 3
   l. 13
   m. 12
   n. 9
   o. 5

2. a. Visual--eye
   b. Hearing--ear
   c. Taste--tongue
   d. Smell--upper nasal cavity
   e. Touch--skin

3. Discussion should include:
   a. Carry messages from sense organs to the central nervous system
   b. Carry messages from central nervous system back to muscles and glands which translate message into action

4. a. M
   b. S

5. a. Sense of smell
   b. II
   c. Oculomotor
   d. IV
   e. Movement of eye, taste, mastication, secretion, and touch
   f. VI
   g. Facial
   h. VIII
   i. IX
   j. Vagus

k. Spinal accessory

l. Movement of tongue muscles

6. a. 2

   b. 1

   c. 3

7. a. Buccal

   b. Incisive

   c. Mental foramen and nerves

   d. Inferior alveolar

   e. Lingual

8. a. Infraorbital

   b. Nasopalatine

   c. Anterior superior alveolar

   d. Middle superior alveolar

   e. Posterior superior alveolar

   f. Anterior palatine

9. Spray, liquid, ointment

10. a. I

    b. B

11. a. 2

    b. 1

    c. 2

    d. 2

    e. 1

    f. 2

    g. 2

    h. 1

12. Discussion should include:

    a. Prevents conduction of impulses along sensory nerves to brain

    b. Sets up chemical reaction in the injection site to prevent further impulses

    c. Decreases promotability of membranes

13. b, c, e, f

14. a. Allergy
    b. Swelling (edema), rash, large welts, itching
    c. Extrinsic asthma
    d. Antihistamine
15. b, c, e, f, g
16. Evaluated to satisfaction of instructor
17. Performance skills evaluated to satisfaction of instructor

SKELETAL SYSTEM
UNIT IV

UNIT OBJECTIVE

After completion of this unit, the student should be able to take alginate impressions and pour plaster dental models. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with skeletal system to the correct definitions.
2. Label bones of the cranium.
3. Identify bones of the face.
4. Identify landmarks of mandible.
5. Discuss characteristics of the mandible.
6. Match landmarks of maxilla to the correct definitions.
7. Identify landmarks of the maxillary palate.
8. List suture connections between bones of the cranium.
9. Match parts of temporomandibular joint to the correct description.
10. Classify characteristic actions of the temporomandibular joint.
11. Demonstrate the ability to:
    a. Take alginate impression for study model.
    b. Pour a plaster of paris model.

SKELETAL SYSTEM
UNIT IV

SUGGESTED ACTIVITIES

I. Instructor:

  A. Provide student with objective sheet.

  B. Provide student with information sheet.

  C. Make transparencies.

  D. Discuss unit and specific objectives.

  E. Discuss information sheet.

  F. Provide skeleton model for identification of bone markings, joints and sutures.

  (NOTE: If your department does not have one, borrow a skeleton model from a nursing class or hospital.)

  G. Provide equipment for Job Sheets #2 and #3.

  H. Demonstrate and discuss procedures outlined in job sheets.

  I. Explain how gypsum is changed into plaster of paris.

  J. Discuss factors which influence the setting time of plaster.

  K. Take students on field trip to a dental laboratory to observe other methods of using impression materials.

  L. Give test.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Transparency masters

    1. TM 1--Bones of the Cranium

    2. TM 2--Bones of the Face

    3. TM 3--Landmarks of the Mandible

    4. TM 4--Structures and Landmarks of the Maxillary Palate

    5. TM 5--Parts of the Temporomandibular Joint

    6. TM 6--Hinge and Glide Action of the Temporomandibular Joint

    7. TM 7--Types of Joints

D. Job Sheets

1. Job Sheet #1--Take Alginate Impression for Study Model

2. Job Sheet #2--Pour a Plaster of Paris Model

E. Test

F. Answers to test

III. Unit references:

A. Anderson, Pauline C. *The Dental Assistant.* 3rd ed. Albany: Delmar Publishers, 1974.

B. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W. B. Saunders Co., 1976.

C. Thomas, Virginia E. *Life Sciences for Health Technologies.* Huntington Beach, California: Technicourse Inc., 1970.

D. Young, Jack. *Outline of Oral and Dental Anatomy.* New York: Blakiston Division/McGraw Hill Book Co., 1974.

E. Dunn, Martin J., and Shapiro, Cindy Zion. *Dental Anatomy: Head and Neck Anatomy.* Baltimore: Williams and Wilkins Co., 1975.

F. Rogers, Helen. *Nursing I.* Stillwater: Curriculum and Instructional Material Center/State Department of Vocational and Technical Education, 1974.

G. Ferris, Elvira B. and Skelley, Esther G. *Body Structure and Functions.* Albany: Delmar Publishers, 1973.

IV. Film--"The Musculoskeletal System." Available from Robert J. Brady Company, A Prentice Hall Company, Bowie, Maryland 20715.

SKELETAL SYSTEM
UNIT IV

INFORMATION SHEET

I. Terms and definitions

A. Skull--Bony framework that rests upon the spinal column

(NOTE: The skull consists of eight cranial bones and fourteen facial bones and the teeth.)

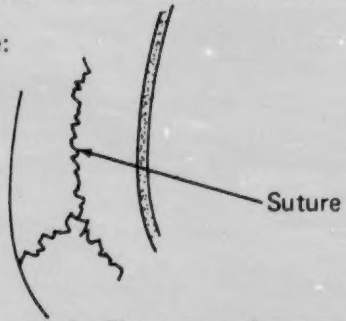
B. Cranium--Part of skull that protects the brain

(NOTE: The cranium does not include facial and jaw bones.)

C. Process--Marked prominence or projection of bone

D. Suture--Junction or fusion between two bones

Example:



E. Supraorbital margin--Sharp, prominent arch formed by the frontal bone over each eye

F. Foramen magnum--Large natural opening in the base of skull through which the spinal cord and coverings, spinal accessory nerves, and vertebral arteries pass

G. Foramen--Small natural opening in a bone through which nerves and blood vessels pass

H. Fossa--Pit or depression in a bone

I. Symphysis--Line of fusion where two distinct bones of the mandible blend together as one

J. Maxilla--Upper jaw bone

K. Scarpa--Serves as a common opening for the two incisive canals

L. Mandible--Lower jaw bone

M. Alveolus--Socket for a tooth

N. Tuberosity--Large roughened projection

INFORMATION SHEET

O. Articulation--Junction between two or more bones

P. Trochanter--Very large process of a bone

Q. Cartilage--White elastic substance attached to bone surfaces at the joint

R. Osteology-Study of bones

S. Arthrology-Study of joints

T. Oblique--On a slant, neither vertical nor horizontal

U. Periosteum--Exterior covering of bones except in joints

V. Compact bone--Dense, hard layer of bone in joint area

W. Cancellous bone--Layer of spongy bone found inside compact bone

X. Meniscus--Cushion of tough specialized connective tissue

(NOTE: This is also known as an articular disc.)

Y. Auditory ossicles--Highly specialized bones of the middle ear

(NOTE: Specialized bones of the middle ear are the icus [2], malleus [2], and stapes [2]. There is one of each on each side.)

II. Bones of the cranium (Transparency 1)

(NOTE: The cranium is composed of eight bones which protect the brain.)

A. Frontal (1)

B. Parietal (2)

C. Temporal (2)

D. Sphenoid (1)

(NOTE: The sphenoid is a single bone made up of a body and paired bones, the greater and lesser wings. The sella turcica is a marked depression in the body of the sphenoid bone which is occupied by the pituitary gland.)

E. Ethmoid (1)

F. Occipital (1)

INFORMATION SHEET

III. Bones of the face (Transparency 2)

(NOTE: The face is composed of fourteen bones.)

A. Nasal (2)

B. Vomer (1)

C. Inferior turbinate (2)

(NOTE: These bones are also known as the nasal conchae.)

D. Lacrimal (2)

E. Maxilla (2)

F. Zygomatic (2)

(NOTE: The zygomatic bones are also known as the malar bones.)

G. Palatine (2)

H. Mandible (1)

(NOTE: There is a hyoid bone which belongs neither to the bones of the cranium nor to the bones of the face, but it is an important structure of the mouth because it supports the tongue and its numerous muscles. Bones of the face are irregular in shape.)

IV. Landmarks of mandible (Transparency 3)

A. Coronoid process

B. Oblique ridge

C. Condyloid process

D. Mandibular notch

E. Ramus

F. Alveolar process

G. Mental foramen

H. Angle of the mandible

I. Mental protuberance

INFORMATION SHEET

- J. Sigmoid notch
- K. Mandibular foramen
- L. Border of the mandible
- M. Myiohyoid ridge
- N. Symphysis
- O. Retromolar area

V. Characteristics of mandible

- A. Only movable bone in skull
- B. Attached to cranium by ligaments of joints
- C. Articulates with temporal bone
- D. Alveolar process in bone contains sockets for the teeth

VI. Landmarks of maxilla

- A. Zygomatic process--Joins the zygomatic bone to form the zygomatic arch, thus making up the cheek bones
- B. Palatine process--Joins the opposing palatine process at the palatine suture to form front part of floor of nasal cavity and roof of mouth
- C. Frontal process--Extends upward and backward along the side of nose
- D. Alveolar process--Extends downward from the body of the maxilla for upper teeth
- E. Maxillary tuberosity--Projects downward from body of maxilla
- F. Infraorbital foramen--Opening below bony cavity of eye that allows nerves and blood vessels to pass through

  (NOTE: There are two infraorbital foramens, one on each side.)

VII. Landmarks of the maxillary palate (Transparency 4)

- A. Incisive foramen
- B. Anterior palatine foramen
- C. Foramina of scarpa
- D. Palatine process of the maxilla
- E. Horizontal plate of palatine bone

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INFORMATION SHEET

F. Greater palatine foramen

G. Lesser palatine foramina

H. Incisive canals

VIII. Suture connections between bones of the cranium

A. Sagittal

(NOTE: The sagittal suture joins the parietal bones which form the sides and roof of the cranium.)

B. Lambdoidal

(NOTE: The occipital bones form back and base of cranium. The lambdoidal suture connects the parietal bones anteriorly.)

C. Coronal

(NOTE: The coronal suture articulation line is between frontal and parietal bone.)

D. Squamoparietal

(NOTE: The squamoparietal is the line uniting the squamosa and parietal bone. The squamous goes into a thin non-existing line.)

IX. Parts of temporomandibular joint (Transparency 6)

A. Glenoid process--Oval depression in temporal bone

B. Articular eminence--Raised portion of temporal bone

C. Condyloid process--Lies in glenoid fossa and is separated from glenoid fossa by the meniscus

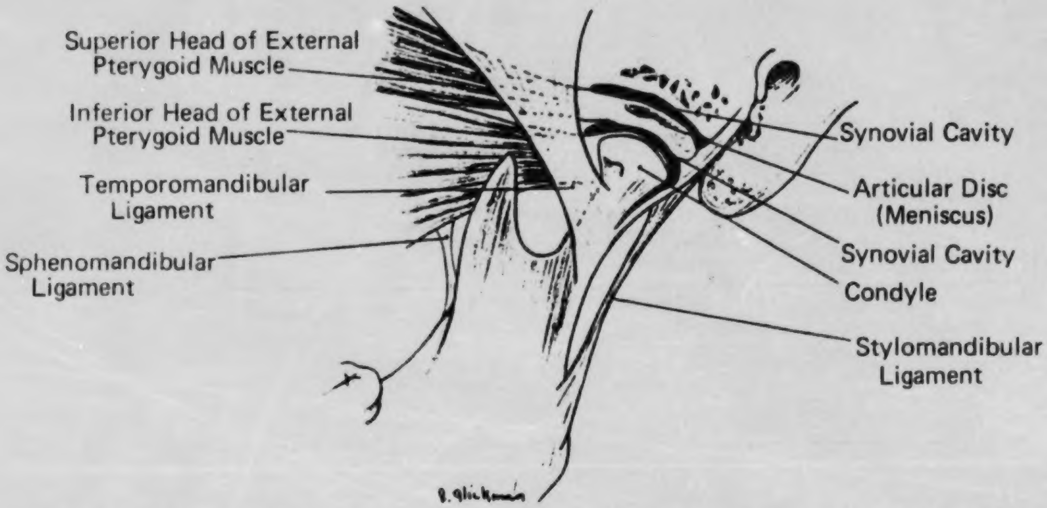
D. Meniscus--Divides articular space between glenoid fossa

(NOTE: Different types and degrees of mouth movement are made possible by presence of meniscus.)

INFORMATION SHEET

E. Capsular ligament--Attaches mandible to the cranium

Example of muscles and ligaments:


Superior Head of External Pterygoid Muscle
Inferior Head of External Pterygoid Muscle
Temporomandibular Ligament
Sphenomandibular Ligament
Synovial Cavity
Articular Disc (Meniscus)
Synovial Cavity
Condyle
Stylomandibular Ligament
B. Glickman

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X. Characteristic actions of the temporomandibular joint (Transparencies 6 and 7)

A. Hinge--Mandible drops downward and backward

(NOTE: This is the first phase in mouth opening.)

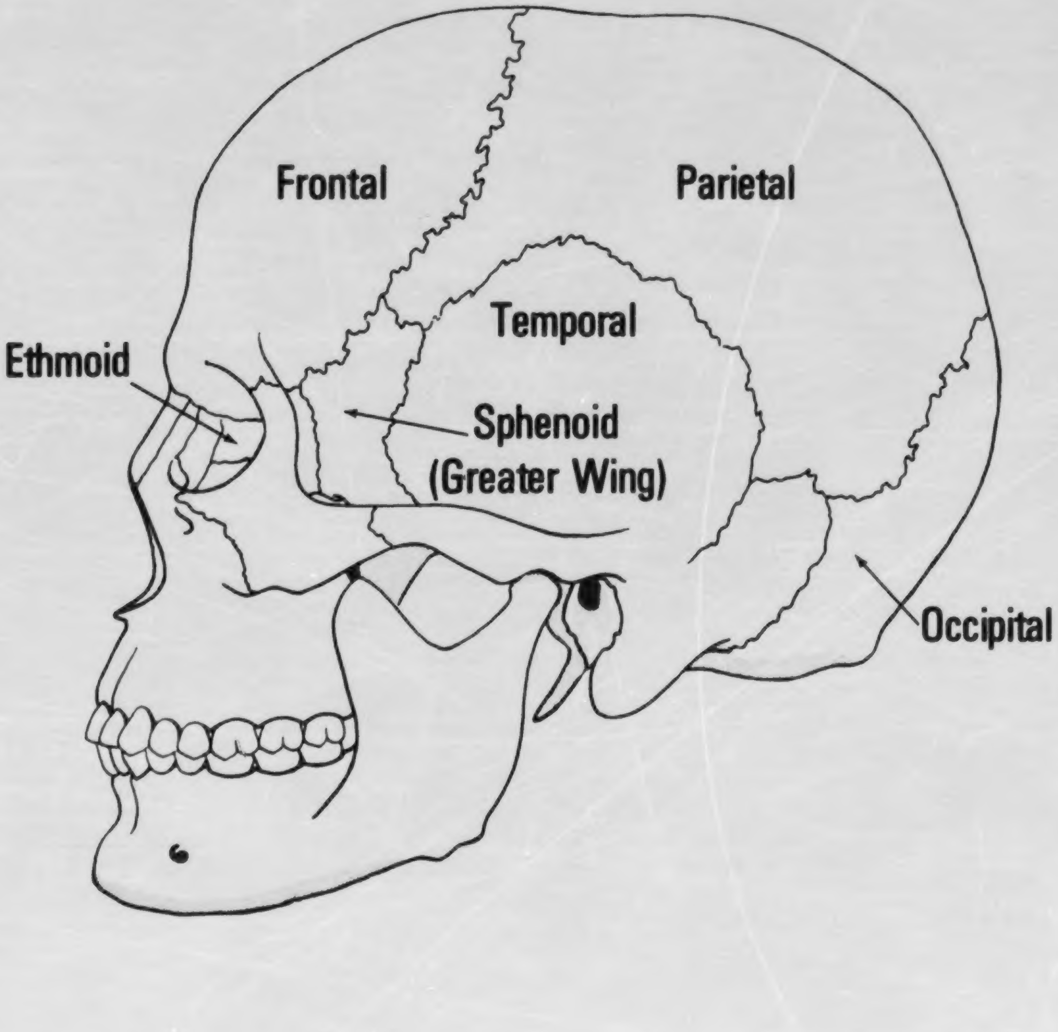
B. Gliding--Consists of movement forward and downward along the articular eminence

(NOTE: This is the second phase in mouth opening.)

C. Hinge and glide--Left and right synovial joints function in unison

Bones of the Cranium

Lateral View


Frontal
Parietal
Temporal
Ethmoid
Sphenoid
(Greater Wing)
Occipital

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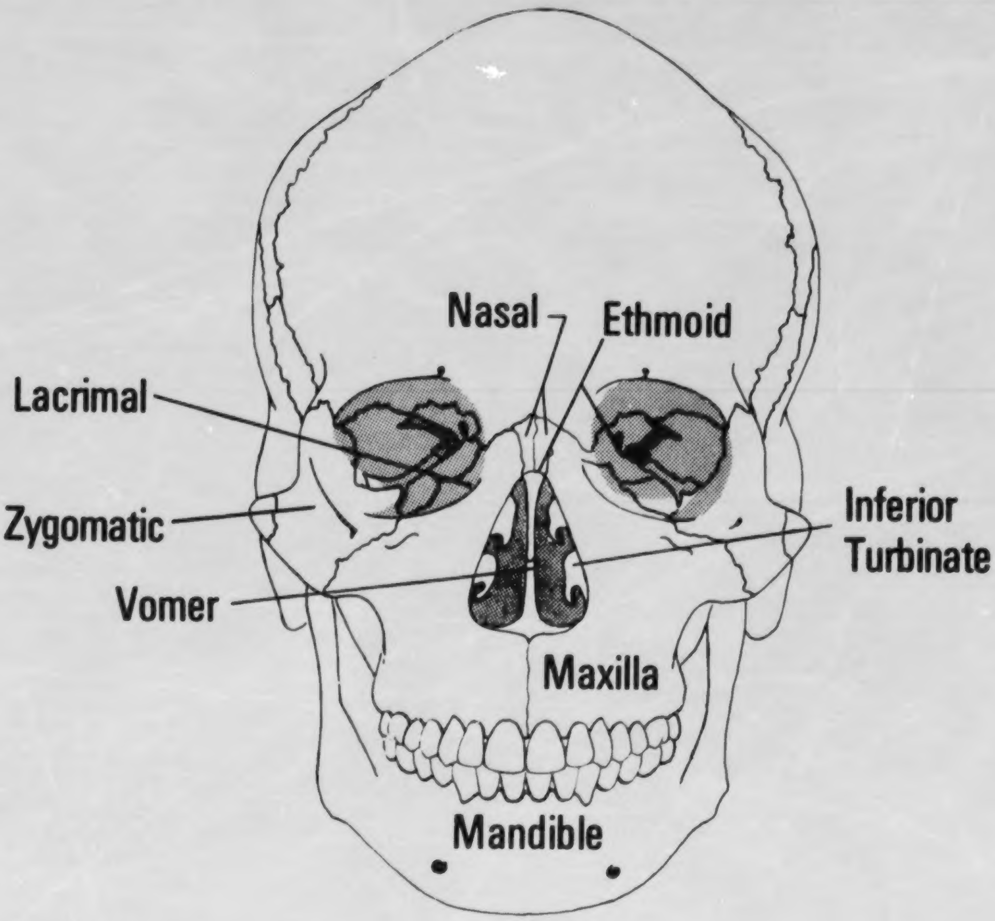
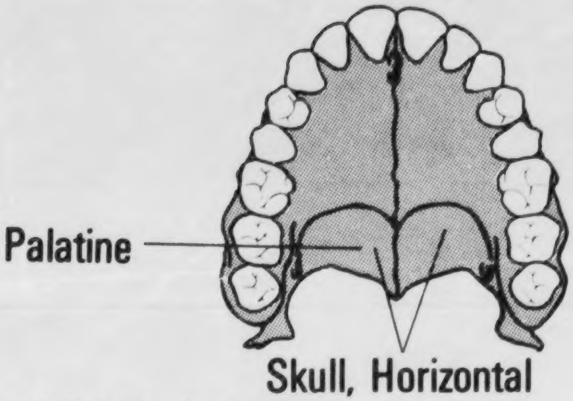
Bones of the Face

Frontal View


Nasal
Ethmoid
Lacrimal
Zygomatic
Inferior Turbinate
Vomer
Maxilla
Mandible


Palatine
Skull, Horizontal

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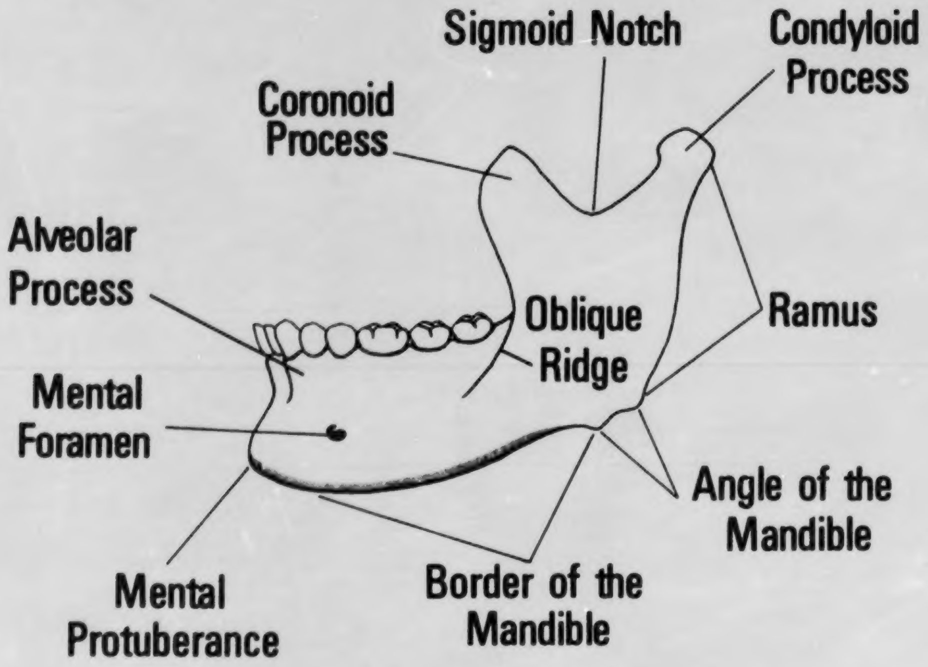
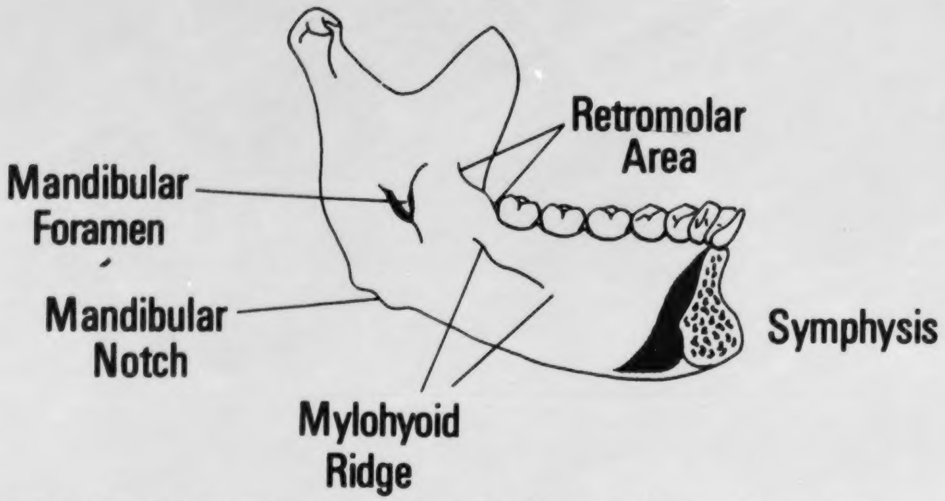
Landmarks of the Mandible


Sigmoid Notch
Condyloid Process
Coronoid Process
Alveolar Process
Oblique Ridge
Ramus
Mental Foramen
Angle of the Mandible
Mental Protuberance
Border of the Mandible


Retromolar Area
Mandibular Foramen
Mandibular Notch
Symphysis
Mylohyoid Ridge

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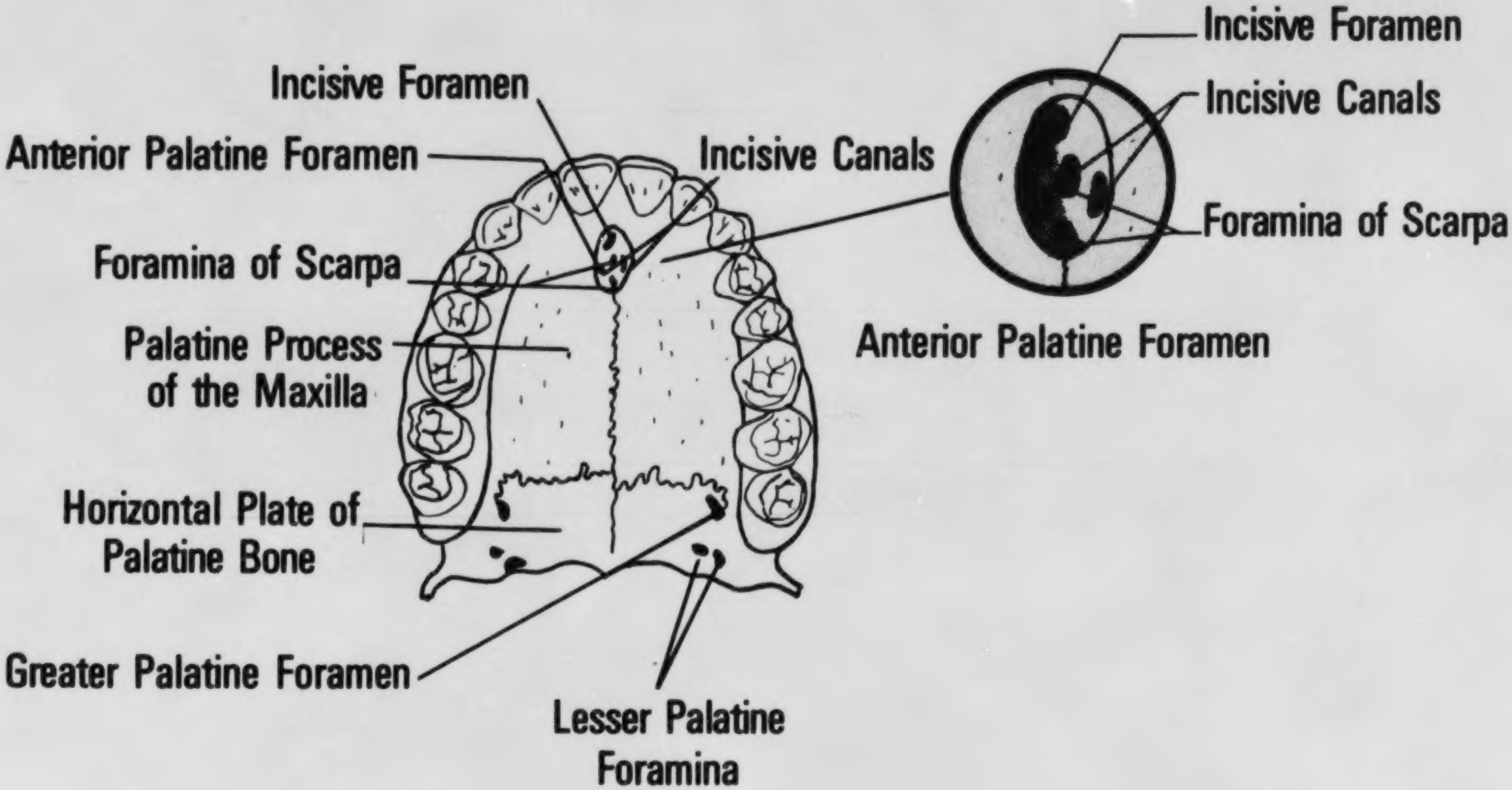
Structures and Landmarks of the Maxillary Palate


Incisive Foramen
Anterior Palatine Foramen
Incisive Canals
Foramina of Scarpa
Palatine Process of the Maxilla
Horizontal Plate of Palatine Bone
Greater Palatine Foramen
Lesser Palatine Foramina
Incisive Foramen
Incisive Canals
Foramina of Scarpa
Anterior Palatine Foramen

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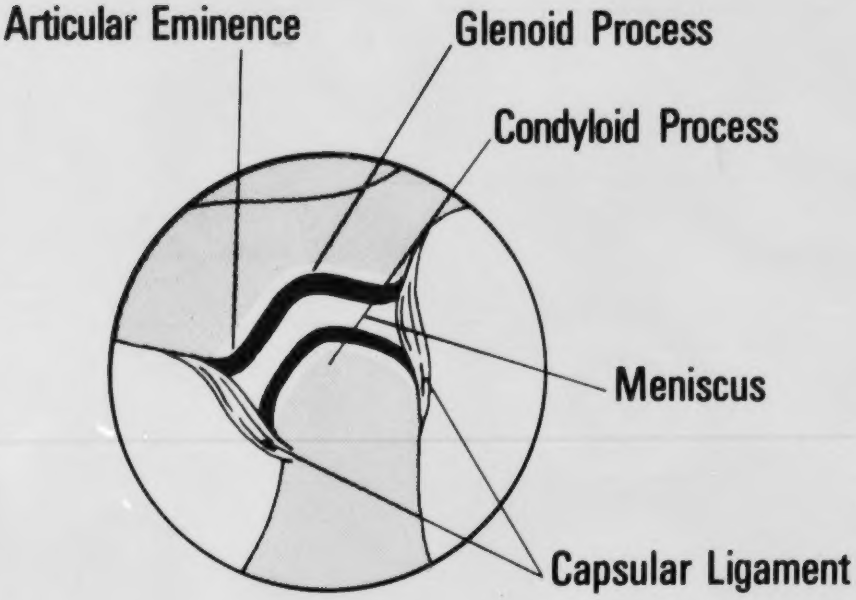
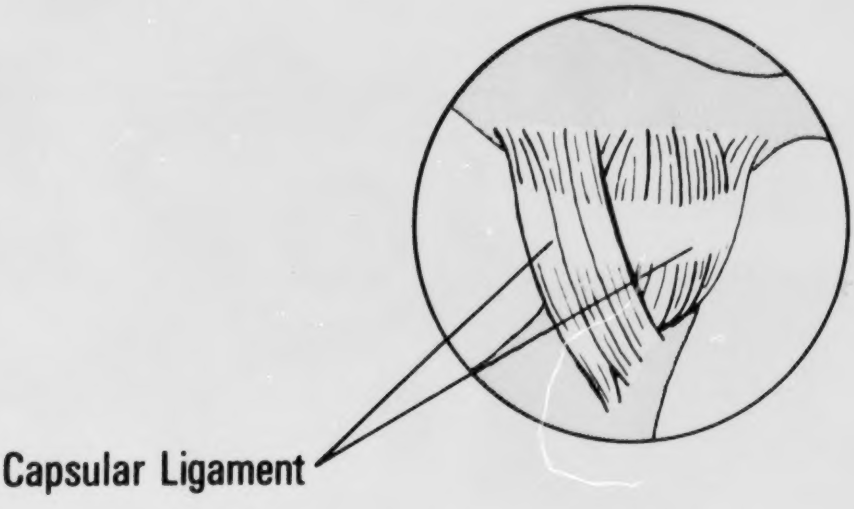
Parts of the Temporomandibular Joint


Articular Eminence
Glenoid Process
Condyloid Process
Meniscus
Capsular Ligament


Capsular Ligament

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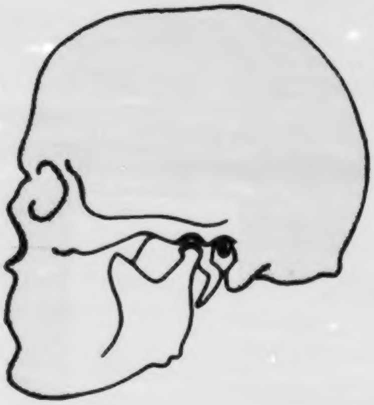
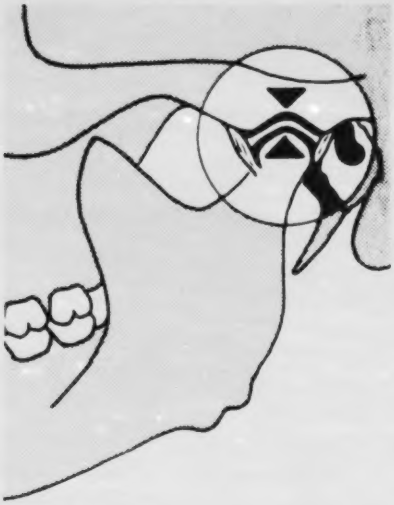
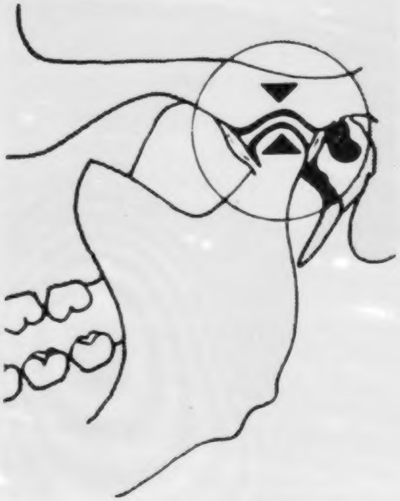
DA - 175-B

Hinge and Glide Action of the Temporomandibular Joint

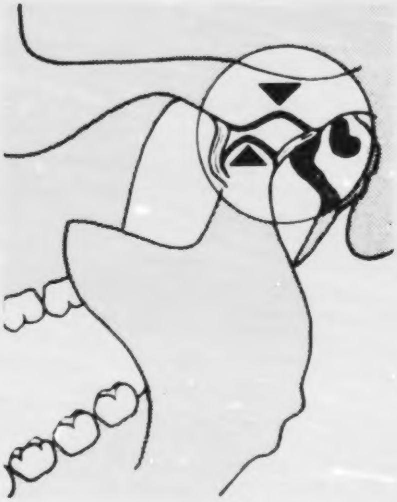




Jaw Closed

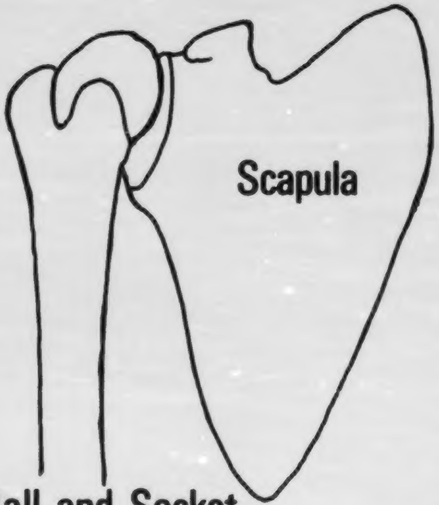


Jaw Open
Hinge Action

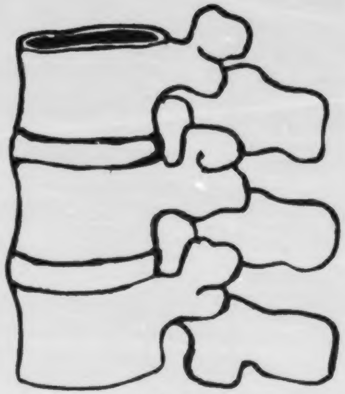


Jaw Wide Open
Glide and Hinge

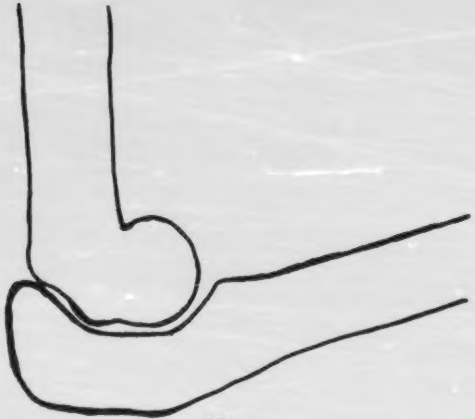
Types of Joints



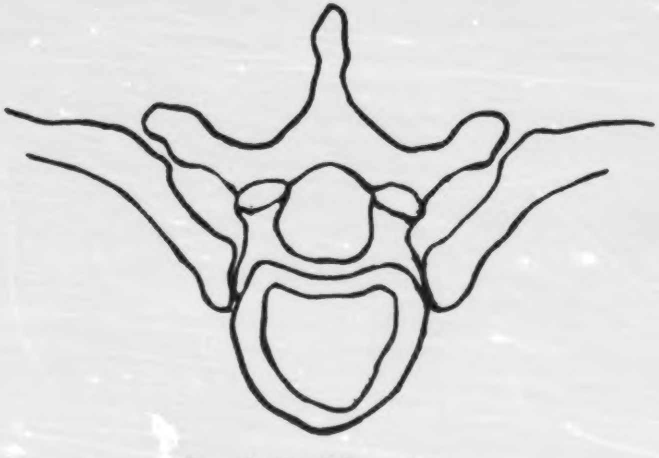
Ball and Socket



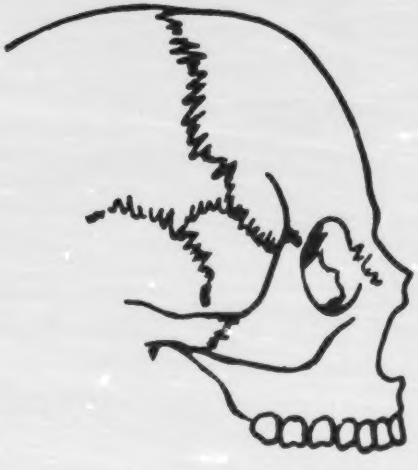
Gliding



Hinge



Partially Movable



Immovable

SKELETAL SYSTEM
UNIT IV

JOB SHEET #1--TAKE ALGINATE IMPRESSION FOR STUDY MODEL

(NOTE: Under the Dental Practice Act, most states have designated that the dental assistant may take the alginate impressions for study models. This is done by inserting the loaded tray with alginate into the patient's mouth, and allowing it to jell or set.)

I. Equipment

   A. Impression material (Figure 1)

   B. Measuring devices (Figure 1)

   (NOTE: Measuring devices are contained in can of impression material.)

   C. Plaster bowl (Figure 1)

   D. Spatula (plaster) (Figure 1)

   E. Timer (Figure 1)

   F. Thermometer

   G. Water

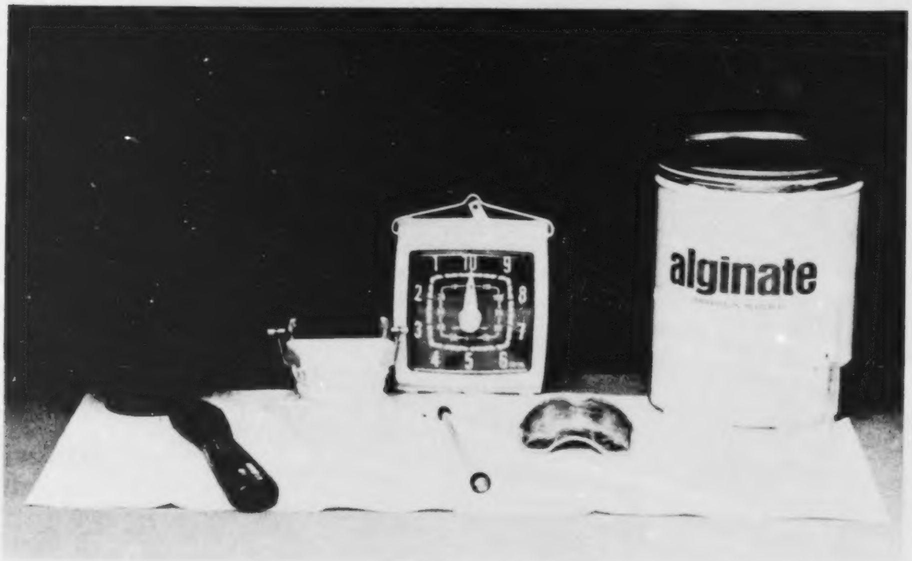


FIGURE 1

JOB SHEET #1

H. Impression trays (Figure 2)

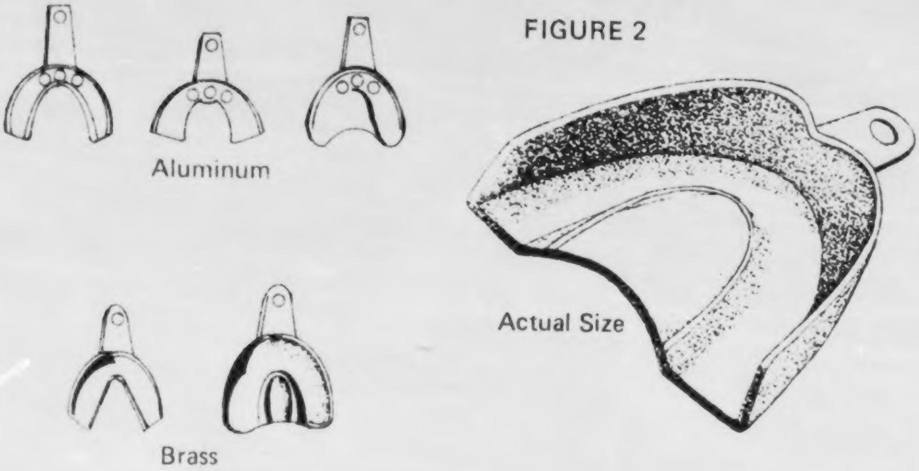

Aluminum
Brass
Actual Size

FIGURE 2

I. Scissors (Figure 3)

(NOTE: Types of scissors will vary from office to office. These are used for cutting various types of waxes.)

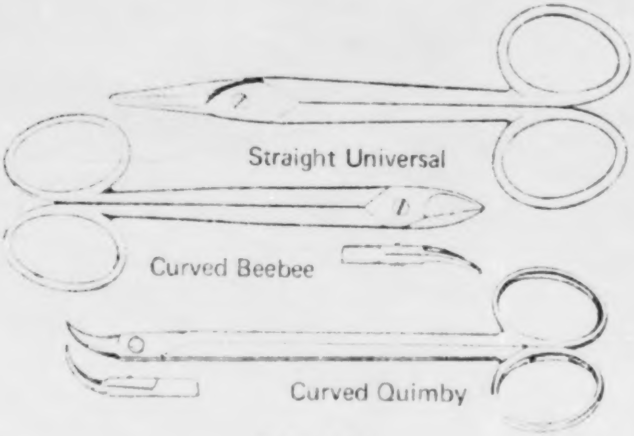

Straight Universal
Curved Beebee
Curved Quimby

FIGURE 3

JOB SHEET #1

J. Beading wax

K. Mouth mirror

II. Procedure

A. Select impression tray

1. Choose oversized tray for patient's mouth

2. Tray should extend over the retromolar pad in the mandible and the tuberosities in maxillary (Figures 4 and 5)

   (NOTE: A well adapted tray is the secret to a good impression. Beading wax may be adapted to the impression trays to make the patient more comfortable and aid in muscle attachment.)

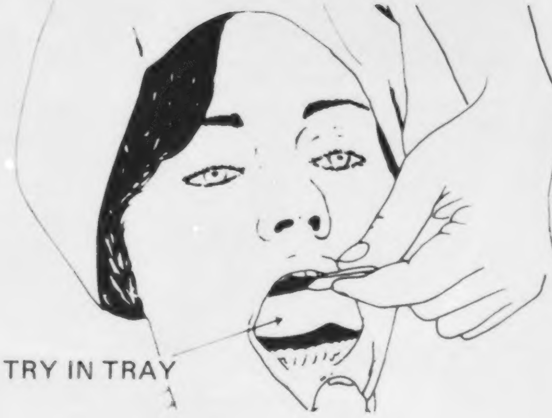


FIGURE 4

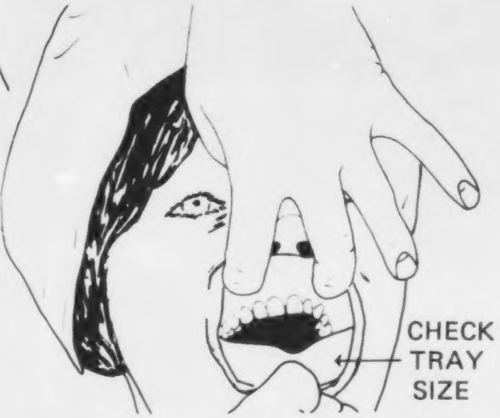


FIGURE 5

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JOB SHEET #1

B. Bead impression trays

1. Measure and cut length of wax needed

2. Press wax around outer edge of trays (Figures 6 and 7)

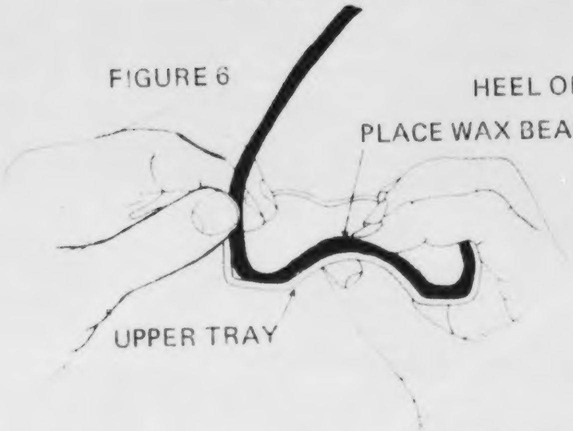

FIGURE 6

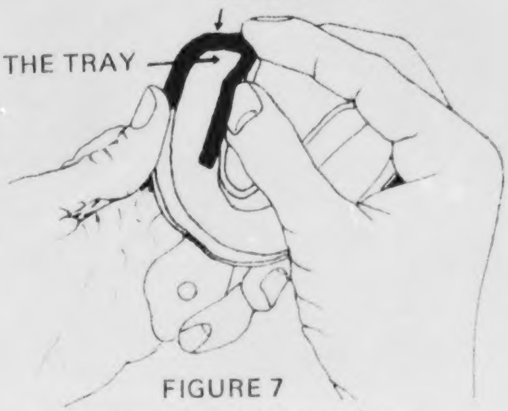

FIGURE 7

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C. Position patient's head

(NOTE: Instruct patient in procedure for alginate impression and setting time of two or three minutes.)

1. Keep patient's head in normal upright position for mandibular impression

2. Tip patient's head forward for maxillary impression

(NOTE: This is done to prevent alginate from flowing into the throat and causing patient to gag.)

D. Prepare mouth for impression

1. Ask patient to rinse mouth with astringent mouthwash

2. Reduce the amount of saliva in mouth if needed

(NOTE: This can be accomplished by packing gauze in the mandibular arch.)

E. Mix impression material

1. Fill measuring device with water

2. Use thermometer to check for temperature of 70° to 72° F

(NOTE: For every degree of temperature increased, working time is decreased seven and one half seconds.)

JOB SHEET #1

3. Empty water into bowl

   (NOTE: When using powder in vacuum-sealed can, shake can several times to mix. Follow manufacturer's directions for amount of powder.)

4. Mix alginate into water

   (NOTE: This should be done rapidly, rolling the bowl with the left hand and using a troweling movement to avoid incorporating air into the mix. Each manufacturer will vary on time, but most of them allow one minute for mixing, one minute for loading tray, one minute for inserting in the mouth.)

F. Load the tray

1. Use spatula to load mandibular tray from lingual or inner side

2. Fill to the outline of the tray

3. Quickly smooth material with wet fingers

   (NOTE: Impressions are taken one at a time. Usually you will want to take the lower impression first, as patient is less likely to gag.)

G. Insert impression

1. Hold loaded tray in one hand

2. Retract patient's lips and cheek with other hand

3. Slip tray sideways into patient's mouth (Figures 8 and 9)

FIGURE 8

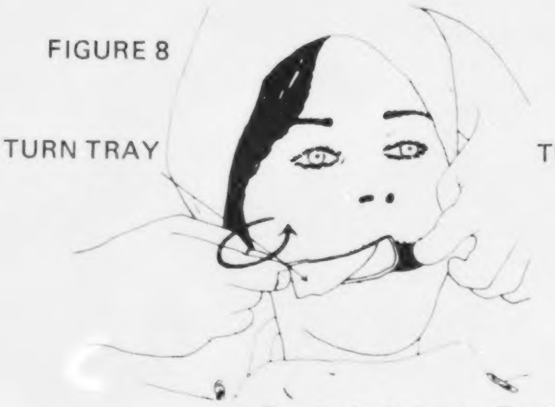
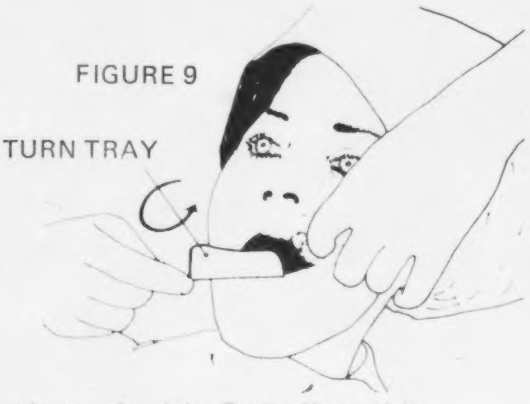


FIGURE 9



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(NOTE: For mandibular impression, the assistant stands in front of the patient to stabilize the tray with two fingers pressing on molar occlusal area. For the upper impression the assistant moves to the back of the chair, centering in the mouth, and presses upward with fingers using tray as guide.)

JOB SHEET #1

H. Remove impression tray

   1. Pull tray straight down for upper teeth

   2. Pull tray straight up for lower teeth

      (NOTE: Remove tray in one direct movement. Distortion can occur if tray is wiggled or tipped loose.)

I. Prepare impression for pouring

   1. Hold impression under tap water to remove excessive saliva

   2. Use the air syringe to blow the impression clear of excessive water

   3. Examine the impression for imperfections

      (NOTE: Lack of perfection or trapped air is the reason for a retake.)

SKELETAL SYSTEM
UNIT IV

JOB SHEET #2--POUR A PLASTER OF PARIS MODEL

(NOTE: This is using an alginate impression.)

I. Equipment

   A. Plaster bowl

   B. Spatula

   C. Alginate impression

   D. Vibrator

   E. Measuring device

   F. Square of wax paper or glass slab

   G. Plaster of paris powder

   H. Water (room temperature)

II. Procedure

   A. Measure contents

      1. Water - 45cc

      2. Plaster of paris - 100 grams

   B. Mix contents

      1. Pour water into bowl

      2. Add powder to bowl

         (NOTE: In some dental offices, you may be asked to sift powder into bowl, allowing it to drop to bottom of the bowl and then spatulate.)

      3. Spatulate by turning bowl with left hand and stirring with spatula in right hand

   C. Form the base

      1. Place alginate 1/2 inch thick on slab (paper)

      2. Form a patty larger than impression on slab (paper)

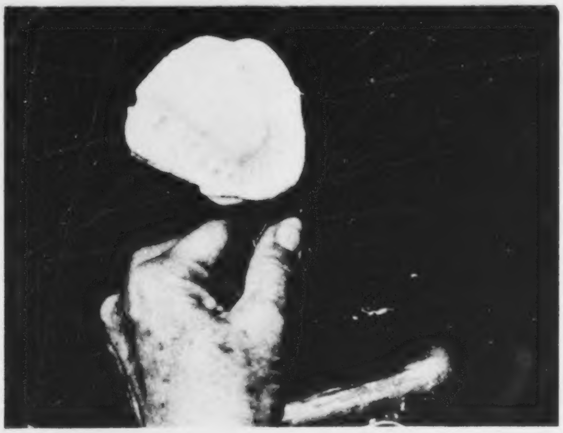
         (NOTE: This is done to form a base for the impression.)

JOB SHEET #2

D. Fill the impression

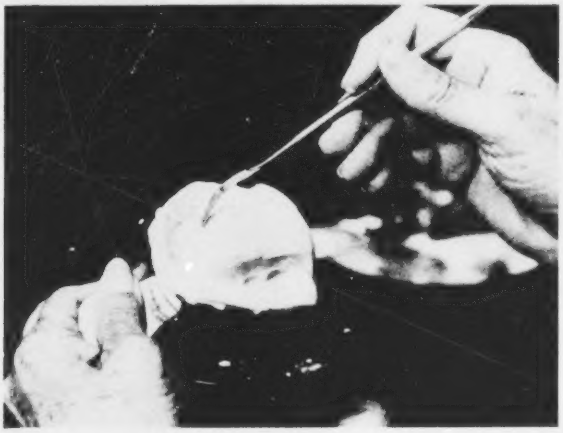
1. Place impression on the vibrator and hold with left hand (Figure 1)

FIGURE 1



2. Hold spatula in right hand and pick up small increments of mix (Figure 2)

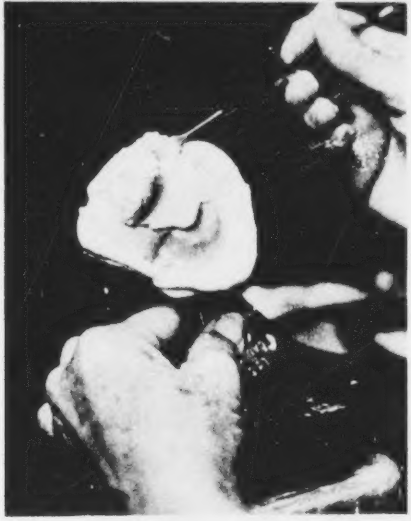
FIGURE 2



JOB SHEET #2

3. Place mix on the right lingual (tongue side) retromolar area, and allow it to flow slowly into tooth indentations (Figure 3)

FIGURE 3

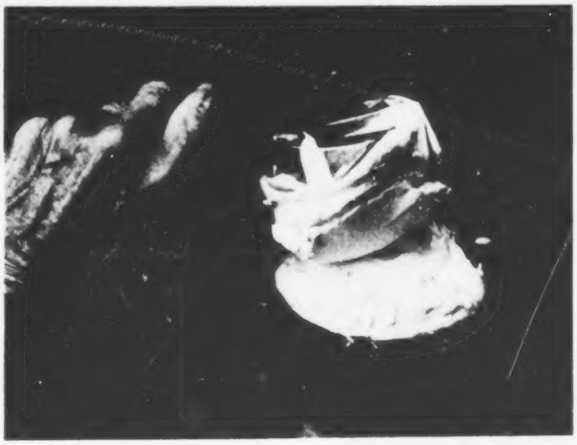


4. Increments of the mix are placed frequently in the same area until impression is filled

   (NOTE: Always keep the plaster of paris flowing downhill and filling each detail tooth completely to avoid entrapping air. Fill the maxillary in the same manner starting at the tuberosities.)

5. Quickly turn over onto patty, seat it with slight pressure to seat impression with patty (Figure 4)

FIGURE 4



JOB SHEET #2

6. Add or take away soft plaster as needed (Figure 5)

FIGURE 5

7. Allow the material to set approximately 45 minutes to 1 hour. Do not attempt to move the model until it is set

8. Clean equipment and laboratory

SKELETAL SYSTEM
UNIT IV

TEST

NAME ________________________________ SCORE ________________

1. Match terms associated with skeletal system to their definitions. Write the correct numbers in the blanks provided.

_____a. Bony framework that rests upon the spinal column

_____b. Part of skull that protects the brain

_____c. Marked prominence or projection of bone

_____d. Junction or fusion between two bones

_____e. Sharp, prominent arch formed by the frontal bone over each eye

_____f. Large natural opening in the base of skull through which the spinal cord and coverings, spinal accessory nerves, and vertebral arteries pass

_____g. Small natural opening in a bone through which nerves and blood vessels pass

_____h. Pit or depression in a bone

_____i. Line of fusion where two distinct bones of the mandible blend together as one

_____j. Upper jaw bone

_____k. Lower jaw bone

_____l. Socket for a tooth

_____m. Study of bones

_____n. Study of joints

_____o. Large roughened projection

_____p. Junction between two or more bones

_____q. Very large process of a bone

1. Process
2. Suture
3. Skull
4. Foramen magnum
5. Symphysis
6. Cranium
7. Supraorbital margin
8. Maxilla
9. Alveolus
10. Tuberosity
11. Mandible
12. Foramen
13. Fossa
14. Trochanter
15. Arthrology
16. Articulation
17. Osteology

______r. White elastic substance attached to bone surfaces at the joint

______s. On a slant, neither vertical nor horizontal

______t. Cushion of tough specialized connective tissue

______u. Highly specialized bones of the middle ear

______v. Exterior covering of bones except in joints

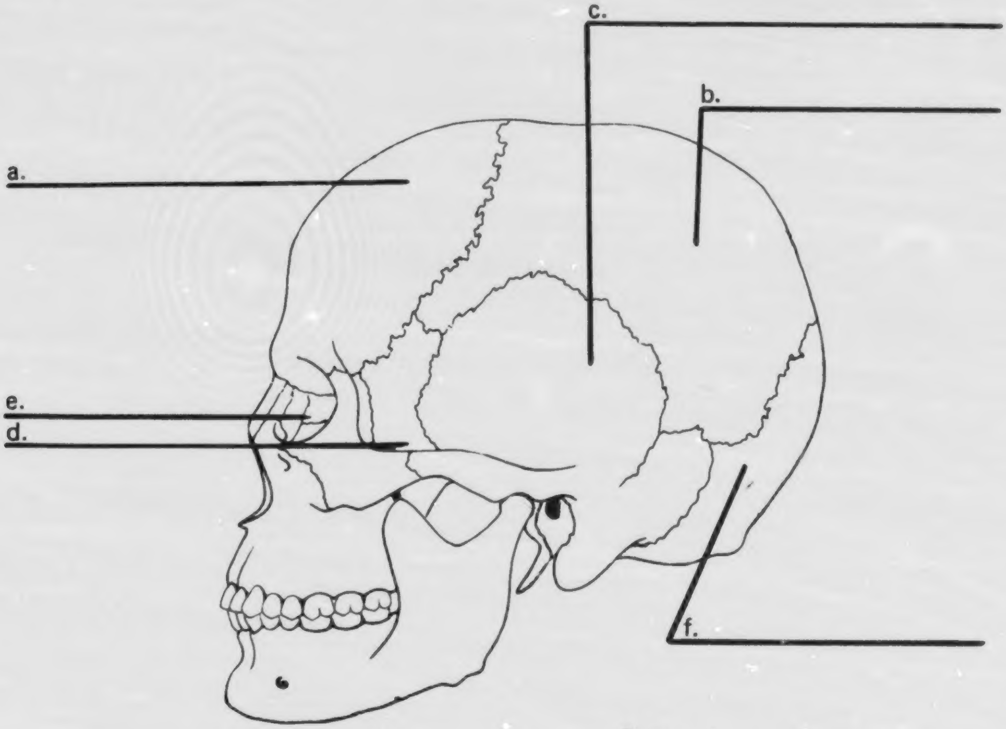
______w. Serves as a common opening for the two incisive canals

______x. Dense, hard layer of bone in joint area

______y. Layer of spongy bone found inside compact bone

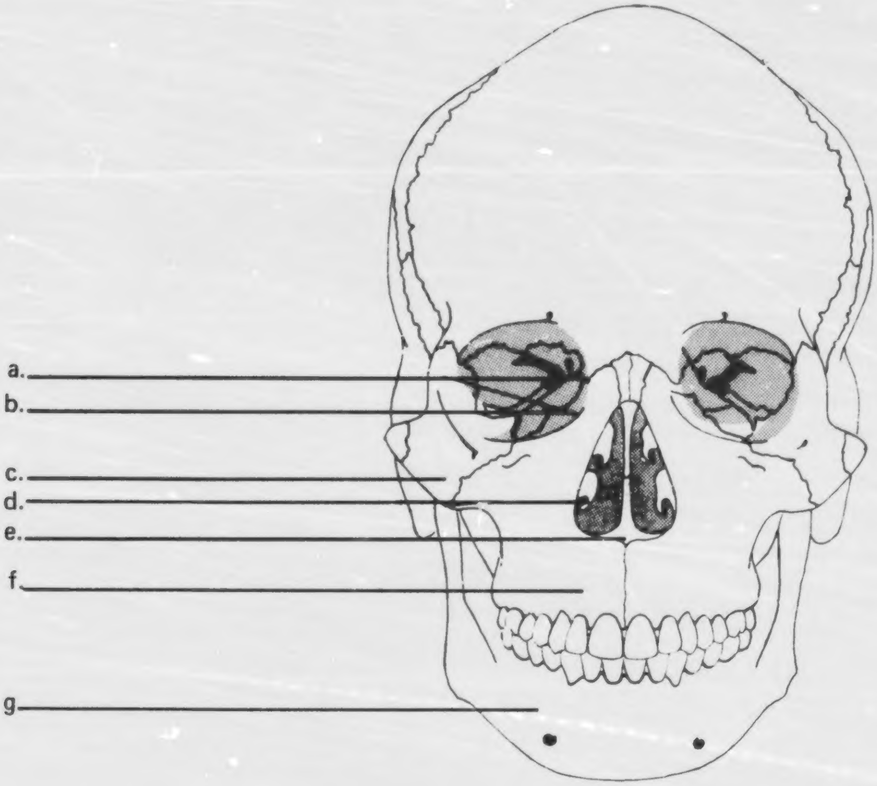
18. Oblique
19. Cartilage
20. Meniscus
21. Auditory ossicles
22. Cancellous bone
23. Compact bone
24. Periosteum
25. Scarpa

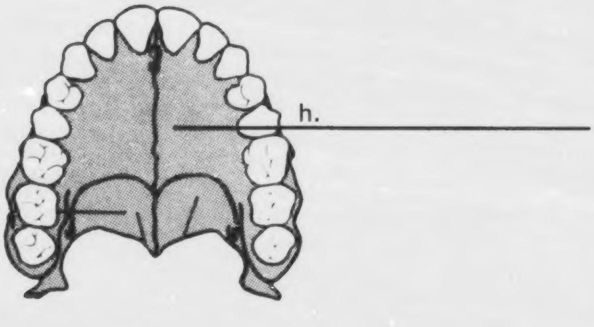
2. Label the bones of the cranium and state how many bones of each type there are.



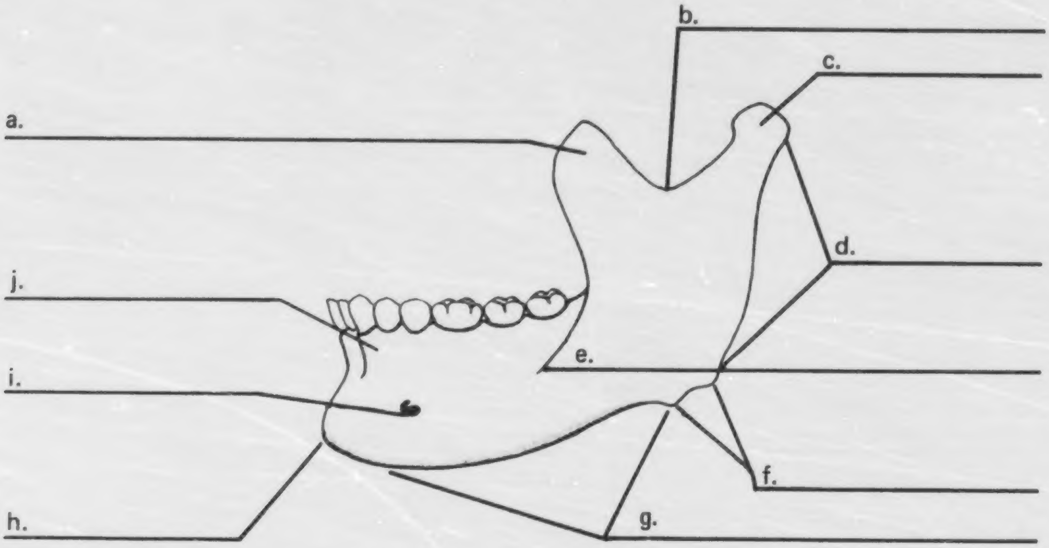
3. Identify the bones of the face and state how many bones of each type there are.

Lacrimal
Vomer
Inferior turbinate
Maxilla
Zygomatic
Nasal
Palatine
Mandible





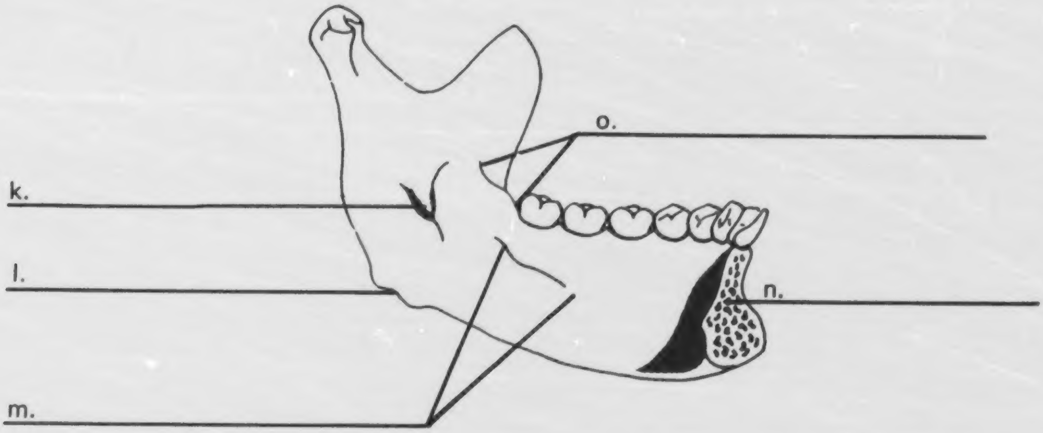
4. Identify landmarks of the mandible. Write the correct answers in the blanks provided.



Condyloid process
Ramus
Coronoid process
Sigmoid notch

Border of the mandible
Angle of the mandible
Mental foramen

Oblique ridge
Alveolar process
Mental protruberance



Mandibular foramen
Retromolar area

Mylohyoid ridge
Mandibular notch

Symphysis

5. Discuss characteristics of the mandible.

____

____

____

____

____

____

____

6. Match landmarks of the maxilla to their definitions. Write the correct numbers in the blanks provided.

_____a. Joins the zygomatic bone to form the zygomatic arch, thus making up the cheek bones

_____b. Joins the opposing palatine process at the palatine suture to form front part of floor of nasal cavity and roof of mouth

_____c. Extends upward and backward along the side of nose

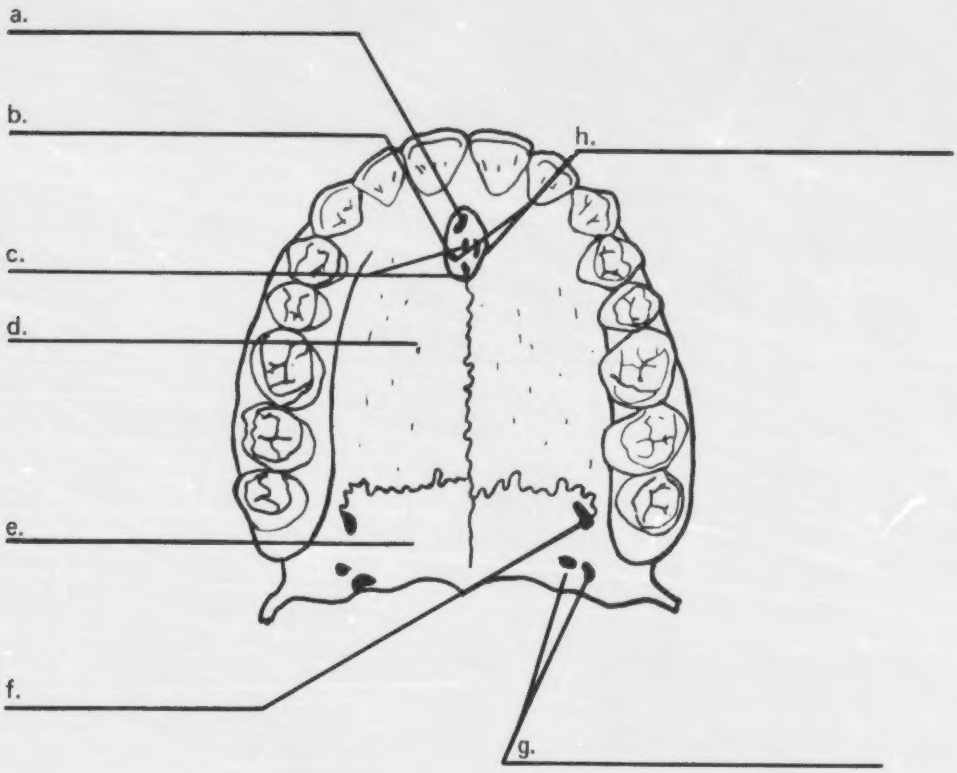
_____d. Projects downward from body of maxilla

_____e. Extends downward from the body of the maxilla for upper teeth

_____f. Opening below bony cavity of eye that allows nerves and blood vessels to pass through

1. Palatine process
2. Frontal process
3. Maxillary tuberosity
4. Zygomatic process
5. Infraorbital foramen
6. Alveolar process

7. Identify landmarks of the maxillary palate. Write the correct names in the blanks provided.



Anterior palatine foramen
Horizontal plate of palatine bone
Incisive canals
Foramina of scarpa
Incisive foramen
Lesser palatine foramina
Palatine process of the maxilla
Greater palatine foramen

8. List the suture connections between the bones of the cranium.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

9. Match the parts of the temporomandiblular joint to their descriptions. Write the correct numbers in the blanks provided.

_____a. Oval depression in temporal bone

_____b. Raised portion of temporal bone

_____c. Lies in glenoid fossa and is separated from the glenoid fossa by meniscus

_____d. Divides articular space between the glenoid fossa

_____e. Attaches mandible to the cranium

1. Condyloid process
2. Capsular ligament
3. Meniscus
4. Glenoid process
5. Articular eminence

10. Classify characteristic actions of the temporomandibular joint. Place an "H" for hinge, "G" for gliding and "Hg" for hinge and gliding in the correct blanks.

_____a. Left and right synovial joints function in unison

_____b. Mandible drops forward and backward

_____c. Consists of movement forward and downward along the articular eminence

11. Demonstrate the ability to:

a. Take alginate impression for study model.

b. Pour a plaster of paris model.

(NOTE: If the above activities have not been finished before the test, ask your instructor when it should be completed.)

SKELETAL SYSTEM
UNIT IV

ANSWERS TO TEST

1. a. 3
    - b. 6
    - c. 1
    - d. 2
    - e. 7
    - f. 4
    - g. 12
    - h. 13
    - i. 5
    - j. 8
    - k. 11
    - l. 9
    - m. 17
    - n. 15
    - o. 10
    - p. 16
    - q. 14
    - r. 19
    - s. 18
    - t. 20
    - u. 21
    - v. 24
    - w. 25
    - x. 23
    - y. 22
2. a. Frontal (1)
    - b. Parietal (2)
    - c. Temporal (2)
    - d. Sphenoid (1)
    - e. Ethmoid (1)
    - f. Occipital (1)
3. a. Nasal (2)
    - b. Lacrimal (2)
    - c. Zygomatic (2)
    - d. Inferior turbinate (2)
    - e. Vomer (1)
    - f. Maxilla (2)
    - g. Mandible (1)
    - h. Palatine (2)
4. a. Coronoid process
    - b. Sigmoid notch
    - c. Condyloid process
    - d. Ramus
    - e. Oblique ridge
    - f. Angle of the mandible
    - g. Border of the mandible

   h. Mental protruberance
   i. Mental foramen
   j. Alveolar process
   k. Mandibular foramen
   l. Mandibular notch
   m. Mylohyoid ridge
   n. Symphysis
   o. Retromolar area

5. Discussion should include:
   a. Only movable bone in skull
   b. Attached to cranium by ligaments of joints
   c. Articulates with temporal bone
   d. Alveolar process in bone contains sockets for the teeth

6. a. 4 d. 3
   b. 1 e. 6
   c. 2 f. 5

7. a. Incisive foramen
   b. Anterior palatine foramen
   c. Foramina of scarpa
   d. Palatine process of the maxilla
   e. Horizontal plate of palatine bone
   f. Greater palatine foramen
   g. Lesser palatine foramina
   h. Incisive canals

8. a. Sagittal
   b. Lambdoidal
   c. Coronal
   d. Squamoparietal

9. a. 4
   b. 5
   c. 1
   d. 3
   e. 2

10. a. Hg
    b. H
    c. G

11. Performance skills evaluated to satisfaction of instructor

MUSCULAR SYSTEM
UNIT V

UNIT OBJECTIVE

After completion of this unit, the student should be able to use knowledge of skeletal muscles to check occlusion, observe muscles in action, make an exercise plan, and retract tongue and cheek muscles. This knowledge will be evidenced by completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the muscular system to the correct definitions.
2. Name major functions of muscles.
3. Identify major muscles of mastication and facial expression.
4. Match major muscles of mastication and facial expression to the correct functions.
5. Identify muscles of the floor of the mouth.
6. Complete a chart on the functions of the muscles of the floor of the mouth.
7. Distinguish between characteristics of the types of major posterior muscles of the mouth.
8. Identify extrinsic muscles of the tongue.
9. Identify selected skeletal muscles of the head and neck.
10. Observe muscles in action.
11. Make an exercise plan.
12. Demonstrate the ability to:
    a. Use muscles of mastication to check occlusion.
    b. Retract tongue and cheek muscles.
    c. Perform finger dexterity exercise.

MUSCULAR SYSTEM
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information, assignment and job sheets.

   C. Make transparencies.

   D. Order films.

   E. Discuss unit and specific objectives.

   F. Discuss information and assignment sheets.

   G. Demonstrate and discuss procedures outlined in job sheets.

   H. Locate muscles on models or on one of the students.

   I. Invite physical fitness person in to demonstrate muscle improvement and care of the muscles.

   J. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Muscles of Mastication and Facial Expression

      2. TM 2--Muscles of the Floor of the Mouth

      3. TM 3--Extrinsic Muscles of the Tongue

      4. TM 4--Muscles of the Head and Neck

   D. Assignment sheets

      1. Assignment Sheet #1--Observe Muscles in Action

      2. Assignment Sheet #2--Make an Exercise Plan

E. Job sheets

1. Job Sheet #1--Use Muscles of Mastication to Check Occlusion
2. Job Sheet #2--Retract Tongue and Cheek Muscles
3. Job Sheet #3--Perform Finger Dexterity Exercise

F. Test

G. Answers to test

III. Unit references:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting*. Philadelphia, Pennsylvania: W. B. Saunders Co., 1976.

B. Dunn, Martin J., and Shapiro, Cindy Zion. *Dental Anatomy: Head and Neck Anatomy*. Baltimore: Williams and Wilkins Co., 1975.

C. Rogers, Helen. *Nursing I*. Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

D. James, Barry. *Call Me Mister*. New York: Milady Publishing Corporation, 1974.

IV. Film--"The Musculoskeletal System." Robert J. Brady Co., A Prentice-Hall Company, Bowie, Maryland 20715.

MUSCULAR SYSTEM
UNIT V

INFORMATION SHEET

I. Terms and definitions

   A. Extrinsic--External origin

   B. Pillar--Supporting structure

   C. Antagonist--Muscle which counteracts with a prime mover

   D. Atrophy–Wasting away or degeneration of a muscle

   E. Body (belly)--Main part of a muscle

   F. Origin--Fixed attachment of muscle which serves as a basis of action

      (NOTE: When muscles are named for their origin and insertion, the origin makes up the first part of the name and the insertion makes up the second part of the name.)

   G. Insertion--Movable attachment where effect of movement is produced

   H. Tendons--Fibrous, nonelastic tissue cords which connect muscle to bone

   I. Ligaments--Fibrous tissues connecting or supporting two or more bones, cartilages or other structures

   J. Elasticity--Ability of a muscle to return to its original length after stretching

   K. Tonus--Normal state of slight contraction of all muscles

      (NOTE: Tonus is present at all times, even when a muscle is resting. Muscle atrophy may occur through lack of use or when nerve supply is damaged.)

II. Major functions of muscles

   A. Communication

   B. Production of body heat

   C. Movement of body

   D. Posture

INFORMATION SHEET

III. Major muscles of mastication and facial expression (Transparency 1)

(NOTE: There are about thirty facial muscles but only the major ones will be discussed here.)

A. Mastication

1. Masseter
2. Internal pterygoid
3. External pterygoid
4. Temporal

B. Facial expression

1. Buccinator
2. Orbicularis oris
3. Mentalis
4. Zygomatic major

(NOTE: The muscles of mastication and facial expression are found on both sides of the face.)

IV. Functions of the major muscles of mastication and facial expression

A. Masseter--Acts to close jaw

B. Internal pterygoid--Aids in closing jaw

C. External pterygoid--Aids in opening and protruding jaw

D. Temporal--Acts to close jaw

E. Buccinator--Compresses cheek, holds food in contact, and retracts angle of mouth

F. Orbicularis oris--Closes and protrudes lips

G. Mentalis--Raises and wrinkles skin of the chin and pushes up lower lip

H. Zygomatic major--Draws angle of the mouth upward and backward

INFORMATION SHEET

V. Muscles of the floor of the mouth (Transparency 2)

   A. Mylohyoid

   B. Stylohyoid

   C. Geniohyoid

   D. Digastric

      1. Anterior

      2. Posterior

VI. Functions of muscles of the floor of the mouth

MUSCLES	FUNCTIONS
Mylohyoid	Elevates the tongue Depresses the jaw Aids in forming the floor of the mouth
Digastric (NOTE: The digastric muscle is composed of two bodies united by a central tendon which connects to the body of the hyoid bone.)	Posterior body helps to fix hyoid bone Anterior body depresses the jaw Both bodies aid in forming the floor of the mouth
Stylohyoid	Aids in fixing the hyoid bone Aids in forming the floor of the mouth
Geniohyoid	Draws the hyoid forward Depresses the jaw when the hyoid is fixed

VII. Characteristics of types of major posterior muscles of the mouth

   A. Palatoglossus

      1. Forms the anterior pillar of the fauces

         (NOTE: The fauces are a space between the oral cavity and oropharynx.)

INFORMATION SHEET

2. Raises the back of the tongue and narrows the fauces
3. Originates in the soft palate
4. Inserts into the side of the tongue

B. Palatopharyngeus

1. Forms the posterior pillar of the fauces
2. Serves to narrow the fauces and helps to shut off the nasopharynx
3. Originates in the soft palate
4. Inserts into the posterior border of the thyroid cartilage and aponeurosis of the pharynx

VIII. Extrinsic muscles of the tongue (Transparency 3)

(NOTE: There is also an intrinsic group of muscles which are contained within the tongue. They have less effect on tongue movements than the extrinsic muscles.)

A. Genioglossus

(NOTE: This muscle depresses and protrudes the tongue.)

B. Hyoglossus

(NOTE: This muscle retracts and pulls down the side of the tongue.)

C. Styloglossus

(NOTE: This muscle aids in retracting the tongue.)

IX. Selected skeletal muscles of the head and neck (Transparency 4)

A. Temporalis

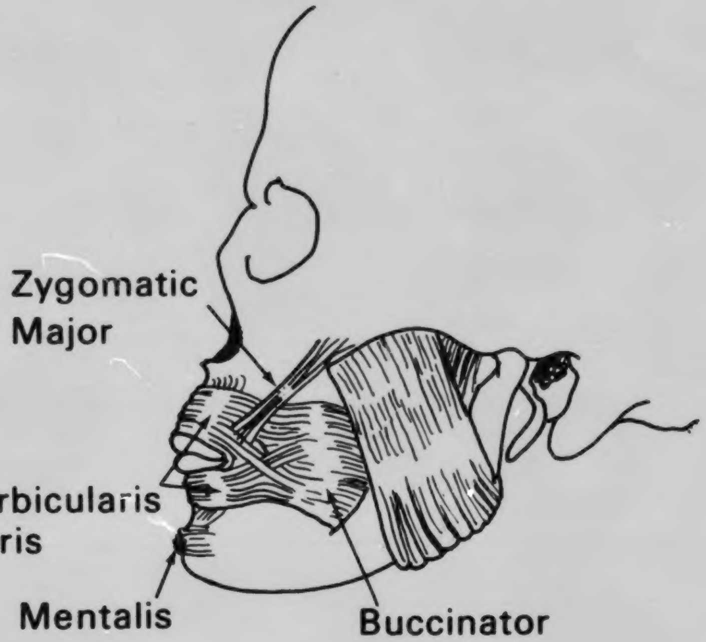
B. Orbicularis oculi

C. Masseter

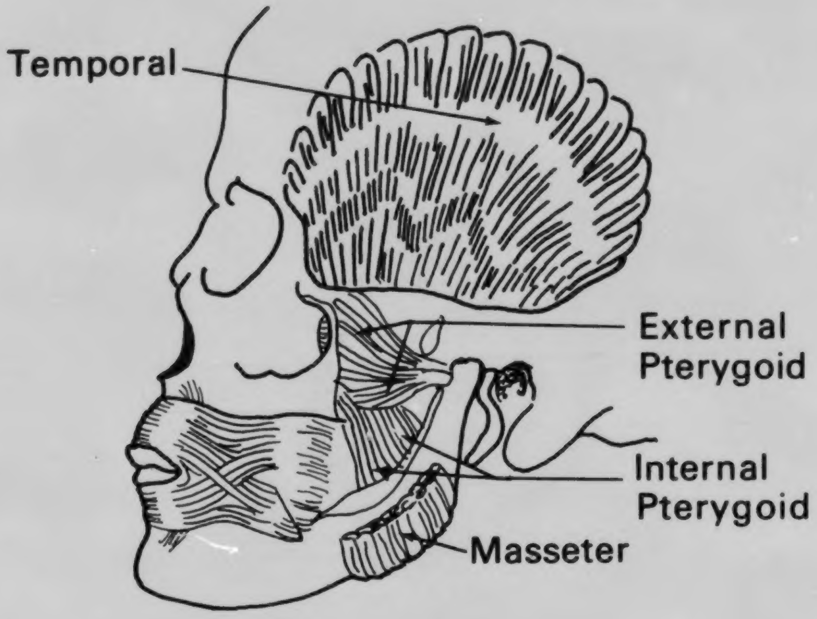
D. Orbicularis oris

E. Sternocleidomastoid

Muscles of Mastication and Facial Expression


Zygomatic Major
Orbicularis Oris
Mentalis
Buccinator

Facial Expression


Temporal
External Pterygoid
Internal Pterygoid
Masseter

Mastication

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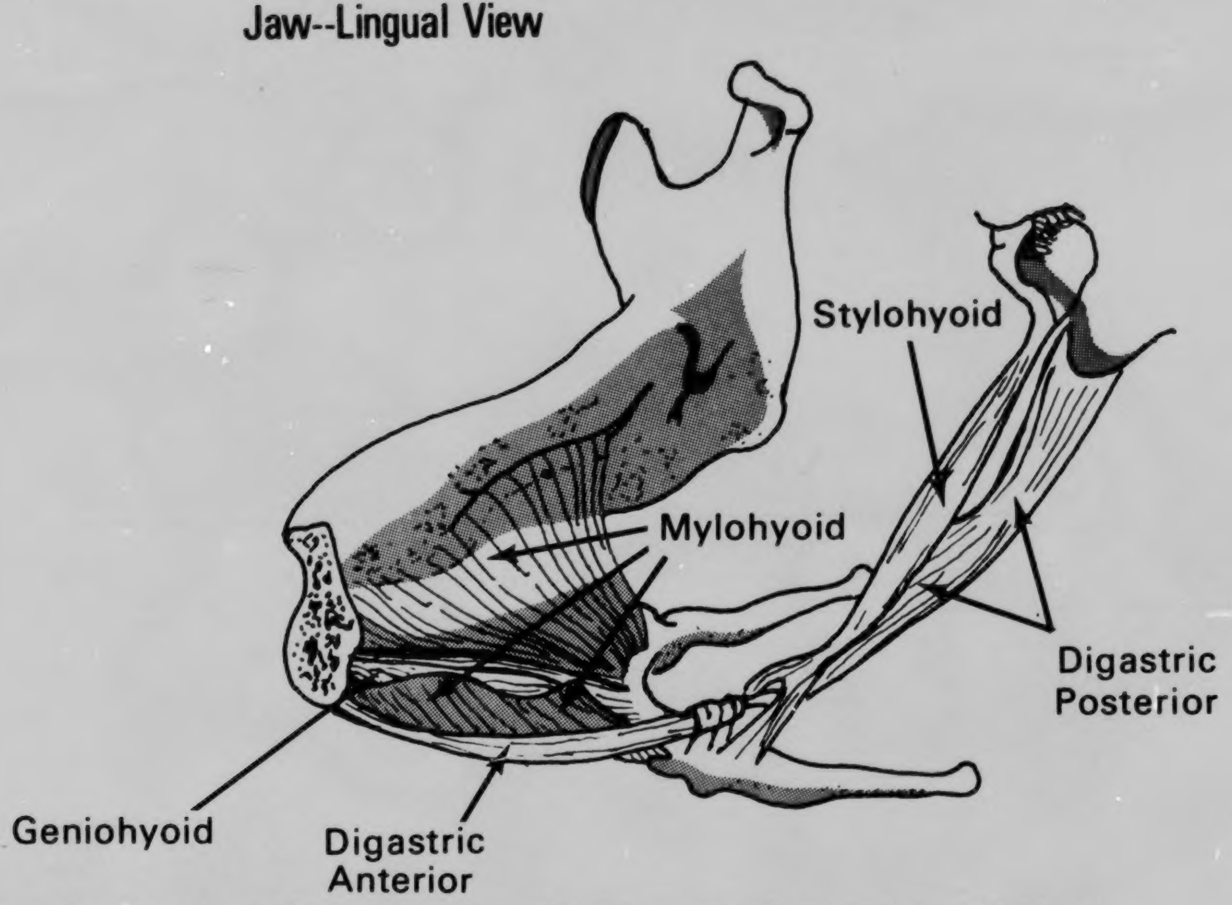
Muscles of the Floor of the Mouth


Jaw--Lingual View
Stylohyoid
Mylohyoid
Digastric Posterior
Geniohyoid
Digastric Anterior

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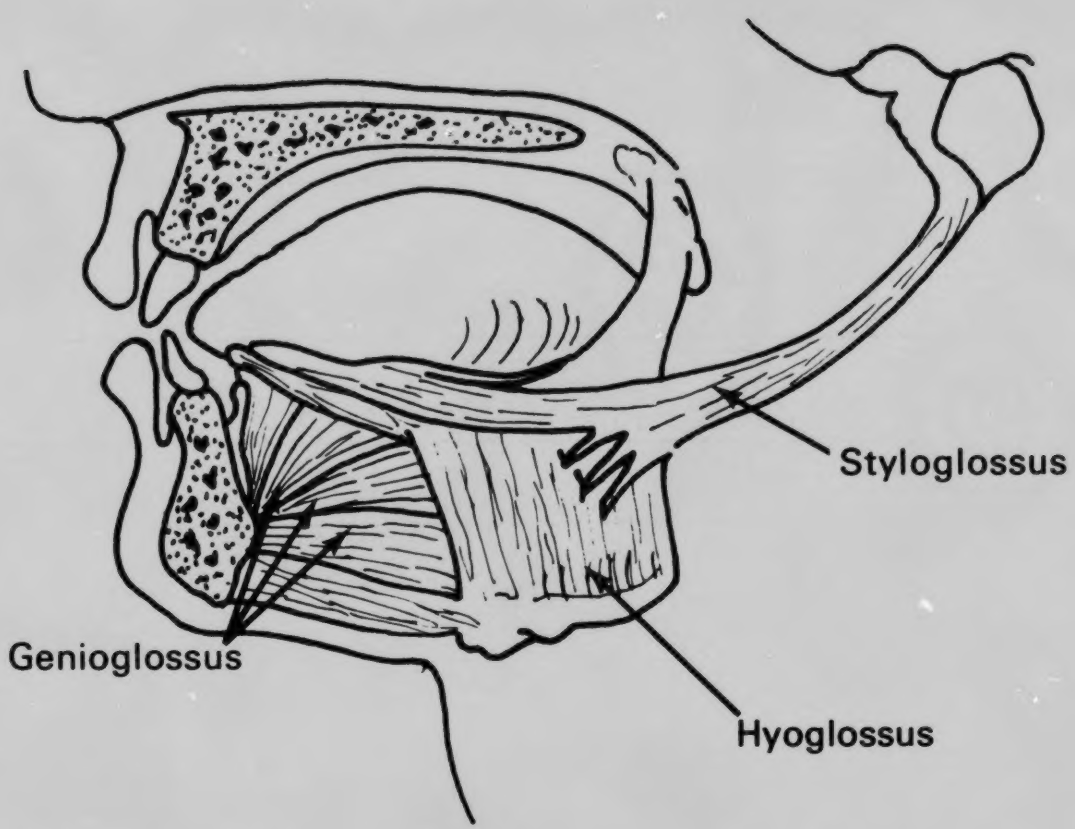
Extrinsic Muscles of the Tongue


Styloglossus
Genioglossus
Hyoglossus

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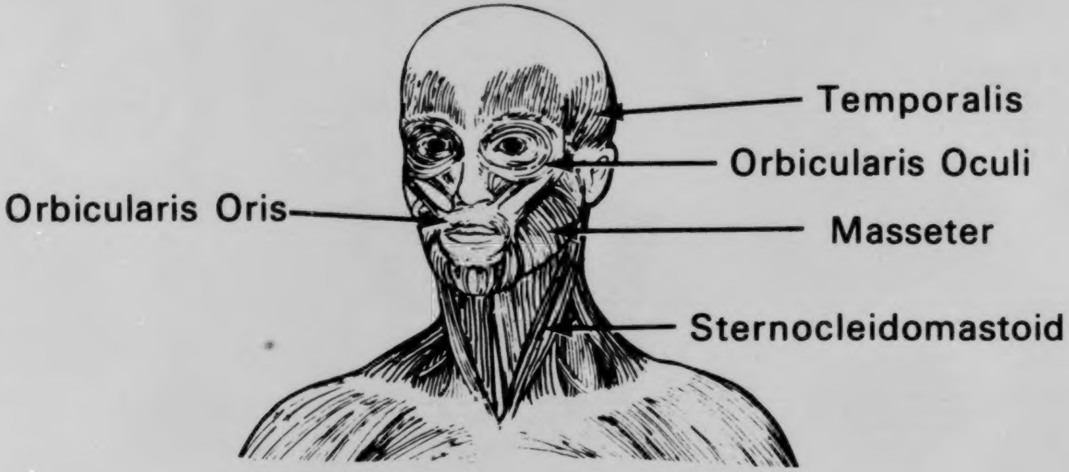
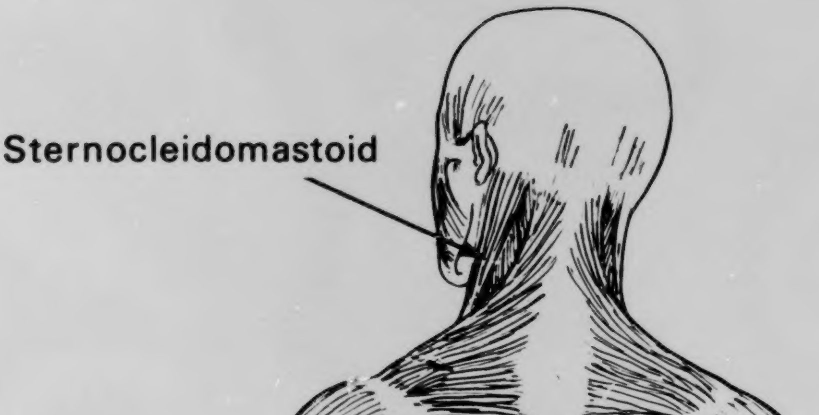
Muscles of the Head and Neck


Temporalis
Orbicularis Oculi
Orbicularis Oris
Masseter
Sternocleidomastoid

Anterior View


Sternocleidomastoid

Posterior View

MUSCULAR SYSTEM
UNIT V

ASSIGNMENT SHEET #1--OBSERVE MUSCLES IN ACTION

NAME ______________________ SCORE ______________________

Oral muscles of mastication and manipulation that are used most often depend on the kind of food we chew. Hard foods require more pressure and action than soft foods.

Check muscles used most during mastication of the foods listed below

	External Pterygoids	Temporals	Masseters	Internal Pterygoids
Hard Foods				
Celery				
Apples				
Carrots				
Cauliflower bits				
Green pepper				
Soft foods				
Bananas				
Cheese				
Ice cream (sugar free)				
Soft candy (sugar free)				

Answer the questions below after you chew and manipulate foods and observe the muscles of mastication and manipulation in action.

MASTICATION

1. Which muscles did you use most? ______________________
2. When are muscles most strained? ______________________
3. When are muscles least strained? ______________________

ASSIGNMENT SHEET #1

MANIPULATION

1. Did you use any muscles of the tongue to manipulate your food?__________________

2. Check the muscles you used the most.

______a. Palatoglossus

______b. Palatopharyngeus

MUSCULAR SYSTEM
UNIT V

ASSIGNMENT SHEET #2--MAKE AN EXERCISE PLAN

NAME ______________________________ SCORE __________________________

Chairside assisting requires a lot of sitting and standing. Without good muscle tone, you will tire easily and soon feel back and leg pressure or aches. It is most important that you keep yourself in good condition through proper diet and exercise.

Regular exercise adds up to wide benefits. For example, speeding up the blood circulation through exercise burns up fat, eliminates waste products from cell tissues and the body, carries nutrients and oxygen to cell tissues, strengthens all muscle tissue, lessens fatigue and builds physical endurance, and promotes an overall feeling of emotional wellbeing.

From the exercises diagrammed and described, select FOUR WARM-UP EXERCISES, FIVE CONDITIONING EXERCISES, and ONE CIRCULATORY ACTIVITY to make an exercise plan. In the beginning, try to do the minimum number suggested without stopping for any given exercise. As your stamina increases, you will be able to increase the number of repetitions you can do without tiring. Your present physical fitness will determine how quickly you can progress from the minimum number suggested to the maximum number. You should be able to do ten exercises (4 warm-ups, 5 conditioning, 1 circulatory) within the fifteen-minute period for the maximum number suggested for each. It will take you about three months to reach this point.

It is important to chart your progress. Perhaps the easiest method is to buy standard 3 x 5 cards on which you can write the ten exercises you select to do in any one week. Then record the number you do at the beginning of the week and the number you can do at the end of the week.

(NOTE: Do not change your program until you can do the maximum number for any one exercise without stopping.)

SAMPLE CARD

Week of ____________________			
TYPE OF EXERCISE	NAME OF EXERCISE	MONDAY (Beginning)	FRIDAY (Ending)
WARM-UPS	Arm Circles Touch Knees Sitting Stretch Half Knee Bend	10 each Couldn't do Couldn't do 10	20 each 5 each 5 each 10
CONDITIONING	(List 5 of these)		
CIRCULATORY	(List 1 of these)		

ASSIGNMENT SHEET #2

WARM-UP EXERCISES

These exercises prepare the body for greater exertion and reduce the possibility of unnecessary strain. There are two each to limber up and stretch the muscles of the arms, back, waistline, and legs. Select one exercise from each group.

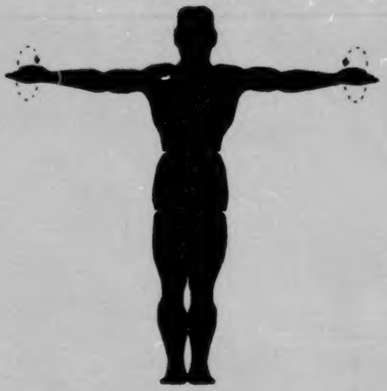
FOR THE ARMS

ARM CIRCLES

Starting Position: Stand erect, arms extended sideward at shoulder height, palms up.

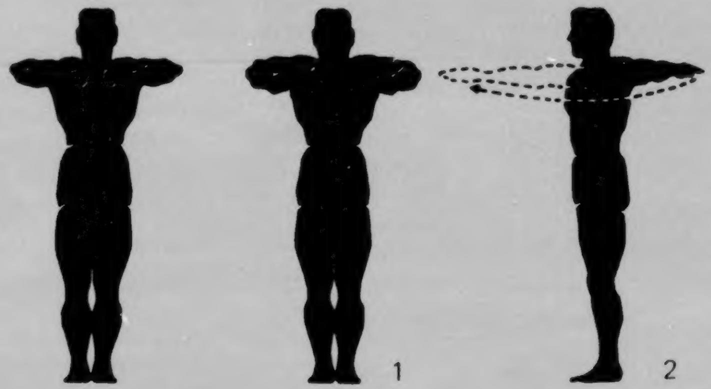
Motion: Make small circles, backward, with arms. Keep head erect. Reverse, turn palms down and do small forward circles.

Repetitions: Minimum--5 backward, 5 forward
Maximum--15 backward, 15 forward



ARM STRETCHER

Starting Position: Stand erect, elbows at shoulder height, fists clenched in front of chest.



Motion: Count 1. Thrust elbows backward vigorously without arching back. Keep head erect, elbows shoulder height. Count 2. Extend arms and swing hands forward, out and back at arm's length. Repeat.

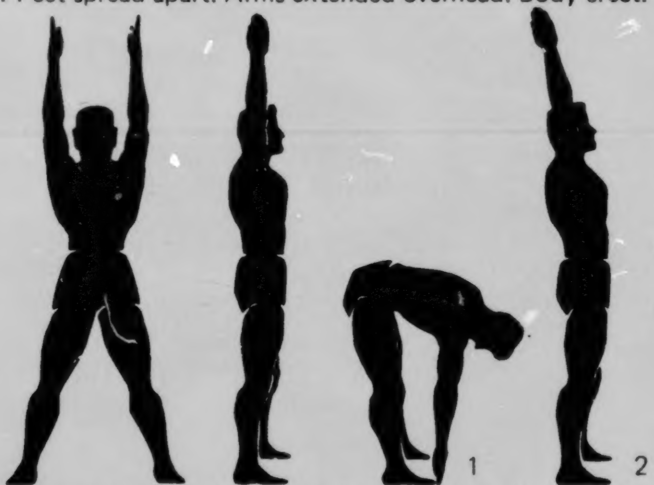
Repetitions: Minimum--5 each of counts 1 and 2
Maximum--20 each of counts 1 and 2

ASSIGNMENT SHEET #2

FOR THE BACK

TOE TOUCH

Starting Position: Feet spread apart. Arms extended overhead. Body erect.

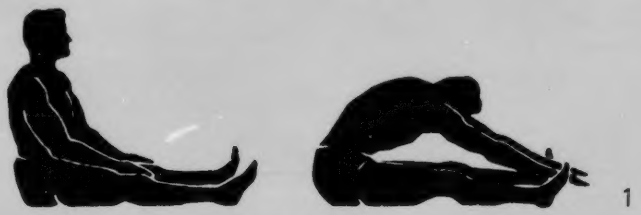


Motion: Count 1. Bend trunk forward and down, keeping knees straight. Touch fingers to toes. Count 2. Return to starting position.

Repetitions: Minimum--5 complete movements
Maximum--20 complete movements

SITTING STRETCH

Starting Position: Sit, legs spread apart, hands on knees.



Motion: Count 1. Bend forward at the waist, extending arms forward as far as possible. Count 2. Return to starting position.

Repetitions: Minimum--10 complete movements
Maximum--30 complete movements

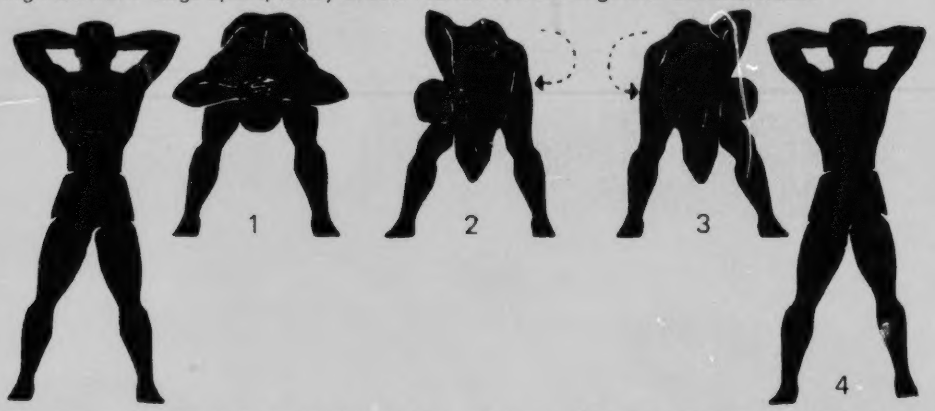
(NOTE: The objective of this exercise is to be able, eventually, to touch the forehead to the floor between the knees.)

ASSIGNMENT SHEET #2

FOR THE WAISTLINE

TOUCH KNEES

Starting Position: Legs apart, body erect. Hands locked together behind head.

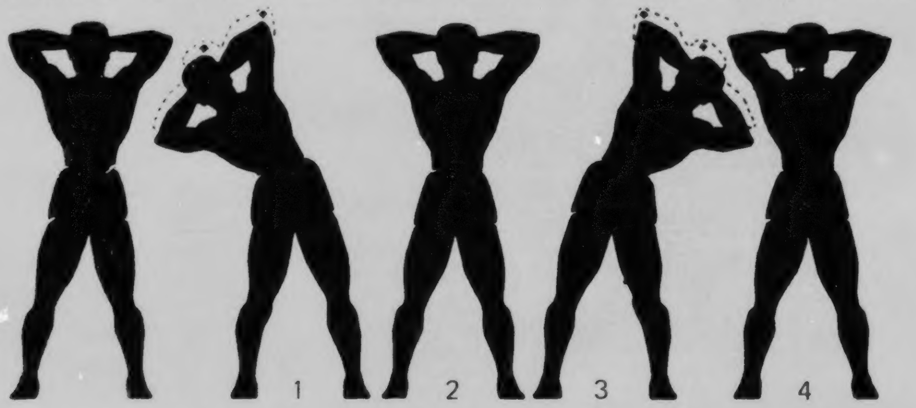


Motion: Count 1. Bend forward from the waistline. Count 2. Touch the right knee with the left elbow. Count 3. Touch the left knee with the right elbow. Count 4. Come up to starting position.

Repetitions: Minimum--5 complete movements of 4 counts each
Maximum--20 complete movements of 4 counts each

BODY FLEX

Starting Position: Stand, feet shoulder-width apart, hands behind neck, fingers interlaced.



Motion: Count 1. Bend to the right side, s-t-r-e-t-c-h. Count 2. Straighten torso. Count 3. Bend to the left side, s-t-r-e-t-c-h. Count 4. Come back to starting position.

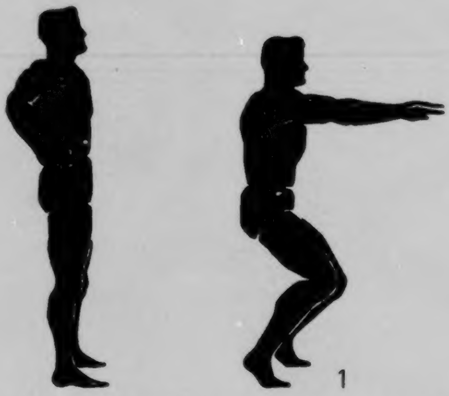
Repetitions: Minimum--5 complete movements of 4 counts each
Maximum--20 complete movements of 4 counts each

ASSIGNMENT SHEET #2

FOR THE LEGS

HALF KNEE BEND

Starting Position: Stand erect, hands on hips.

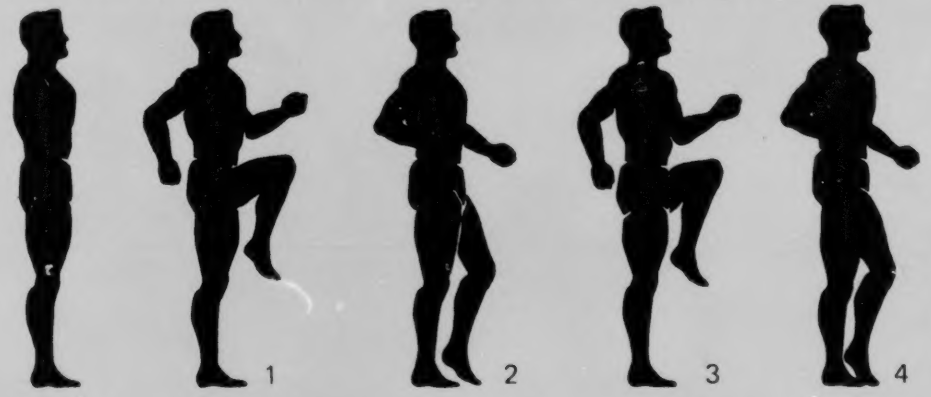


Motion: Count 1. Bend knees halfway while extending arms to shoulder height, palms down. Count 2. Return to starting position.

Repetitions: Minimum--10 complete movements
Maximum--20 complete movements

KNEE LIFT

Starting Position: Stand erect with feet together, arms bent, in running position.



Motion: Count 1. Raise right knee to chest (bend knee). Count 2. Lower right leg. Count 3. Raise left knee to chest. Count 4. Lower left leg.

Repetitions: Minimum--10 each leg
Maximum--20 each leg

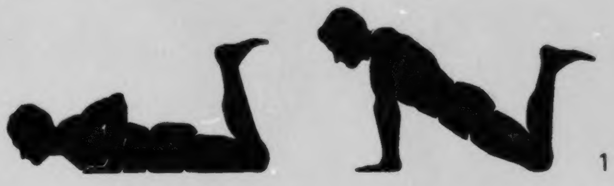
ASSIGNMENT SHEET #2

CONDITIONING EXERCISES

These exercises are systematically planned to tone up the major muscles of the abdomen, back, legs, and arms as well as other groups. Select five.

KNEE PUSHUP

Starting Position: Lie on floor, face down, legs together, knees bent with feet off floor, hands on floor by shoulders, palms down.



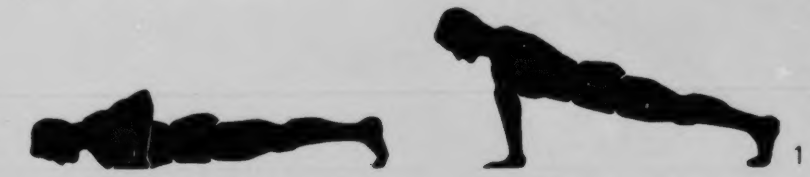
Motion: Count 1. Push upper body off floor until arms are fully extended and body is in straight line from head to knees. Count 2. Return to starting position.

Repetitions: Minimum--5 complete movements
Maximum--20 complete movements

(NOTE: This is much easier than the regular pushup and is recommended for those unable to do the regular pushup.)

REGULAR PUSHUP

Starting Position: Lie on floor, face down, legs together, hands on floor under shoulders with fingers pointing straight ahead.



Motion: Count 1. Push body off floor by extending arms, so that weight rests on hands and toes. Count 2. Lower body until chest touches floor.

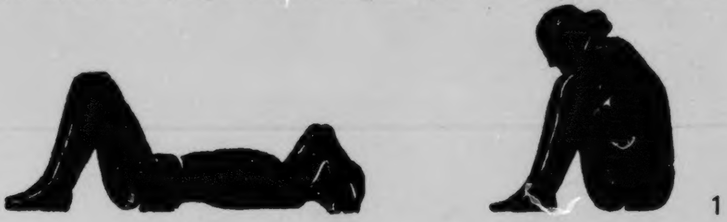
Repetitions: Minimum--4 complete movements
Maximum--50 complete movements

(NOTE: Body should be kept in straight line; buttocks should not be raised; abdomen should not sag.)

ASSIGNMENT SHEET #2

SIT UP

Starting Position: Lie on back, legs bent and together, hands clasped behind head.

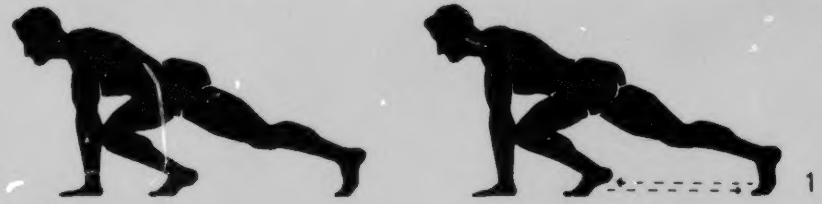


Motion: Count 1. Roll up to sitting position, touching chin to knees. Count 2. Roll back to starting position.

Repetitions: Minimum--5 complete movements
Maximum--30 complete movements

THE SPRINTER

Starting Position: Squat, hands on floor, fingers pointed forward, left leg fully extended to the rear.

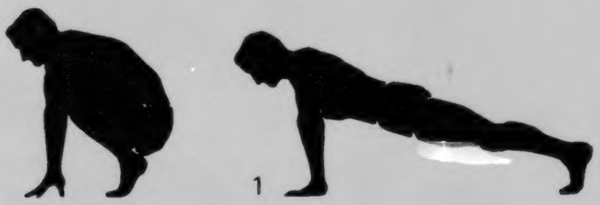


Motion: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands, extending right leg backward--all in one motion. Count 2. Reverse feet again, returning to starting position.

Repetitions: Minimum--10 complete movements
Maximum--30 complete movements

THE SPRINGER

Starting Position: Squat, hands on floor, fingers pointed forward, knees bent, feet together.



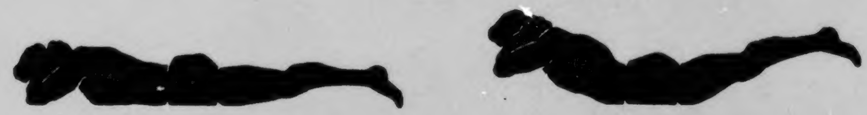
ASSIGNMENT SHEET #2

Motion: Count 1. Keeping hands on floor, spring the legs backward until the body is fully extended, knees straight, weight resting on hands and toes. Count 2. Return to starting position.

Repetitions:	Minimum--5 complete movements Maximum--50 complete movements

PRONE ARCH (FINGERS INTERLACED)

Starting Position: Lie face down, fingers laced behind neck.

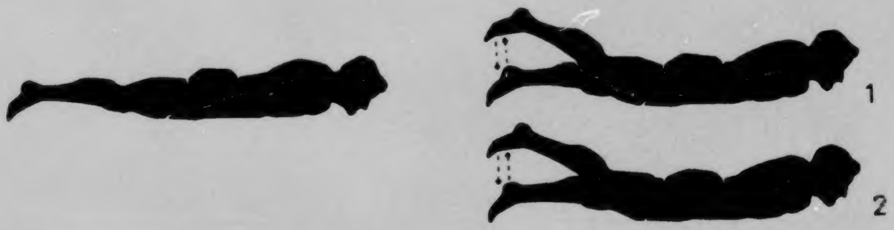


Motion: Count 1. Arch back, legs, and chest off the floor. Stay in this position for five slow counts. Count 2. Return to starting position, flat on the floor.

Repetitions:	Minimum-- 5 complete movements Maximum--30 complete movements

FLUTTER KICK

Starting Position: Lie face down, hands tucked under thighs, palms up.



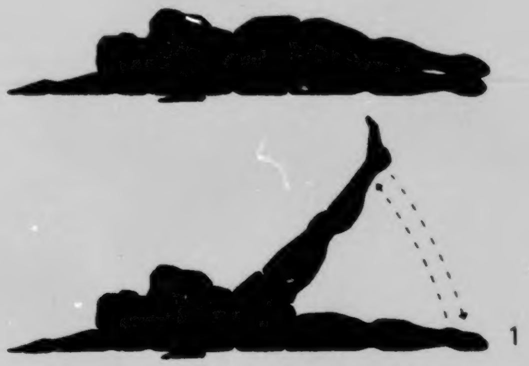
Motion: Arch the back, bringing chest and head up, then flutter kick continuously, moving the legs about 10" apart. Kick from hips with knees slightly bent. Count each kick as one.

Repetitions:	Mimimum--20 counts Maximum--50 counts

ASSIGNMENT SHEET #2

SIDE LEG RAISE

Starting Position: Right side of body on floor, head resting on right hand, left hand on floor in front of chest.

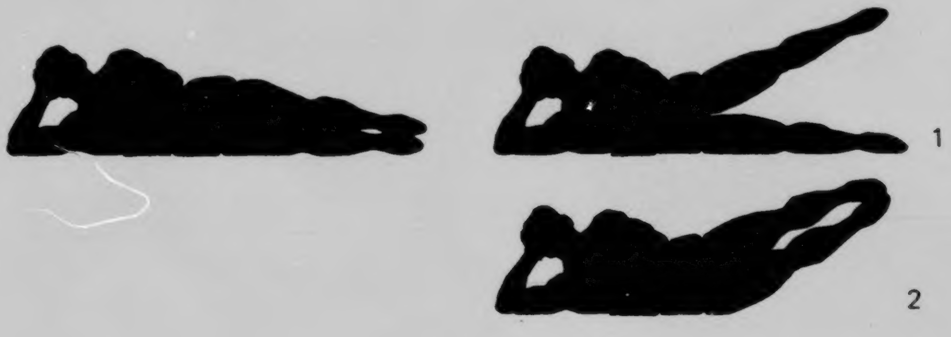


Motion: Whip left leg up and down rapidly, lifting as high as possible off the floor. Count each whip as one. Reverse position and whip right leg up and down.

Repetitions:	Minimum--10 each leg Maximum--30 each leg

ELEVATOR LEG RAISE

Starting Position: Right side of body on floor, head resting on right hand, left hand balancing body in front of chest.



Motion: Raise left leg about 30" off floor and, while keeping it there, slowly raise right leg until toes touch. Slowly lower right leg, keeping left leg up. Repeat on other side.

Repetitions:	Minimum--10 each leg Maximum--30 each leg

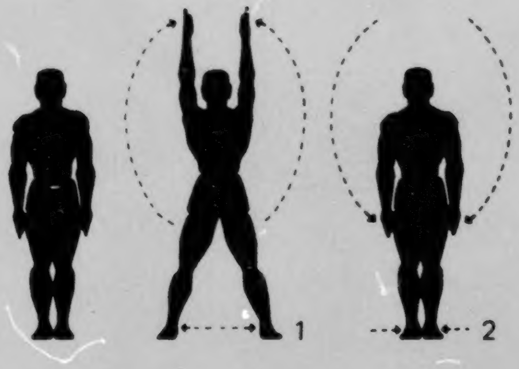
ASSIGNMENT SHEET #2

CIRCULATORY ACTIVITIES

These exercises stimulate and strengthen the circulatory and respiratory systems and increase endurance. Select one of the four to do each day. Vary them as you wish.

STRADDLE HOP

Starting Position: Body erect, feet together, arms at sides.



Motion: Count 1. Jump into the air, flinging arms overhead and spreading legs to land with them apart. Count 2. Jump to starting position.

Repetitions:	Minimum-- 25 complete counts of 2
	Maximum--150 complete counts of 2

A FINAL BIT OF ADVICE

Gradually speeding up, from workout to workout, the rate at which you do each exercise will provide greater stimulation for the circulatory system and will help keep your workouts short. However, each exercise should be performed completely and accurately to insure maximum benefit.

EXPANDING YOUR PHYSICAL WELL-BEING PROGRAM

There are many activities which you may use to supplement your planned exercise program.

WALKING--This deserves special emphasis. Walk every chance you get. Allow extra time to get to the bus, to the store, to meetings, and to other places so you can go, now and then, by footpower. Develop a brisk step, breathe deeply, and swing your arms.

WATER EXERCISES--If you have access to a pool, swimming is the best all-around body conditioner.

ASSIGNMENT SHEET #2

SPORTS--There are many excellent conditioning and circulatory activities in which the amount of exertion is easily controlled so that you can progress at your own rate.

Soccer, basketball, handball, squash, ice hockey, and sports that require sustained effort are valuable aids to building circulatory endurance. However, if you are "out-of-shape" it's important to pace yourself carefully and to stop before you are fatigued.

On days when you get a good workout in sports you can skip all or part of your planned exercise program. Use your own judgment.

Whatever your favorite sport, you will find your enjoyment of it enhanced by the improved physical fitness that is your reward for regular, daily exercise.

Every weekend athlete should invest in frequent workouts at home. Daily workouts get better results than workouts three times a week. If your schedule does not allow for a workout each day, grab every opportunity to improve your fitness. Even a little exercise is better than none.

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MUSCULAR SYSTEM
UNIT V

JOB SHEET #1--USE MUSCLES OF MASTICATION TO CHECK OCCLUSION

(NOTE: This procedure is used to determine if the patient is chewing equally on all tooth surfaces and which teeth are not being used. Use a classmate as your patient.)

I. Equipment

   A. 2 x 2 gauze

   B. Mouth mirror

   C. Explorer

   D. Indicating paper or tape 2" in length

   E. Locking (endo) pliers

II. Procedure

   A. Seat patient

   B. Explain procedure

   C. Insert paper into locking pliers at one end

   D. Ask patient to open mouth

   E. Place indicating paper between bicuspids and molars (chewing surface)

   (NOTE: This paper will be laying flat on the occlusal surface.)

   F. Ask patient to close mouth

   G. Remove pliers

   H. Ask patient to chew gently on paper (back and forth motion)

   I. Observe muscles used

   J. Use pliers to remove paper

   K. Place mouth mirror in mouth at an angle to locate blue mark on teeth

   (NOTE: Indicating marks most often seen are on the maxillary upper cusp and fossa [round depression] on the mandibular.)

MUSCULAR SYSTEM
UNIT V

JOB SHEET #2--RETRACT TONGUE AND CHEEK MUSCLES

I. Equipment

A. Vacuum tip extension

B. Mouth mirror

II. Procedure

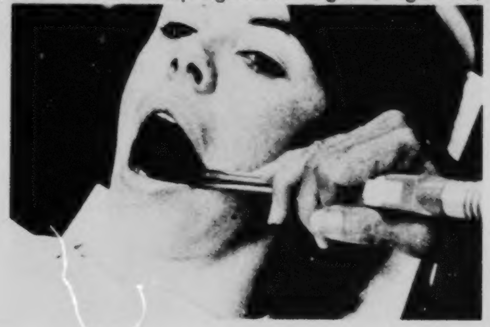
(NOTE: Use a classmate as a patient and select one or more of the above pieces of equipment to practice quadrant retraction. Selection will depend on strength of patient's tongue and cheek muscles. This procedure is of the simplest form of retraction.)

A. Hold vacuum tip in right hand, using palm-thumb grip

Example: Holding pencil with fist gripping around it

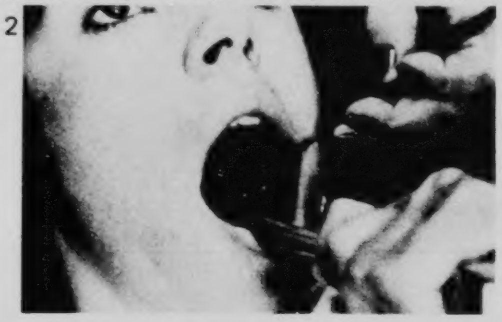
B. Control position of tongue for lower right quadrant by holding mouth mirror or vacuum tip against tongue (Figure 1)

FIGURE 1



C. Retract left lip for lower left quadrant while dentist retracts cheek (Figure 2)

FIGURE 2

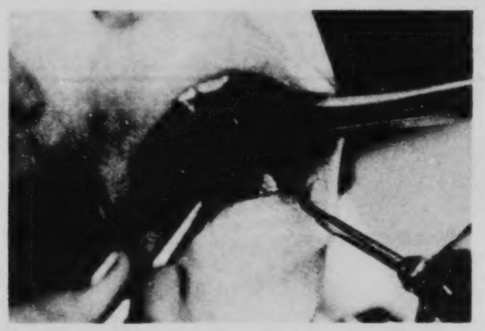


JOB SHEET #2

D. Retract lingual tissue (next to tongue) with mouth mirror while dentist retracts cheek for lower left quadrant (Figure 3)

(NOTE: This is a cross-over technique.)

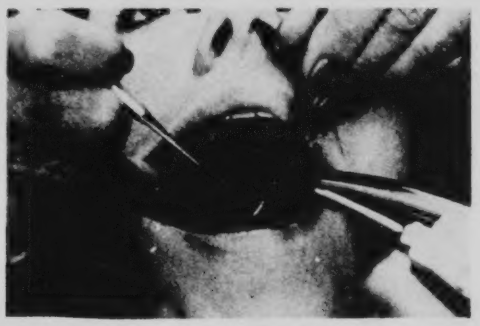
FIGURE 3



E. Observe dentist retracting upper right quadrant by using fingers to retract cheek and hold mouth mirror (Figure 4)

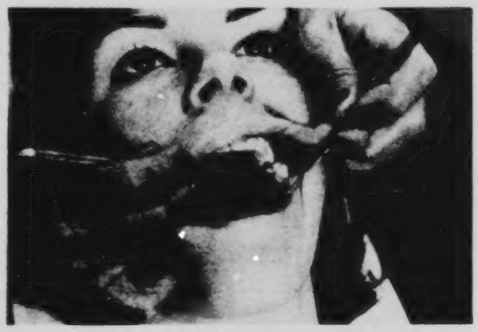
(NOTE: This is the indirect approach.)

FIGURE 4



F. Observe dentist holding left cheek and holding mirror with left hand for upper left quadrant (Figure 5)

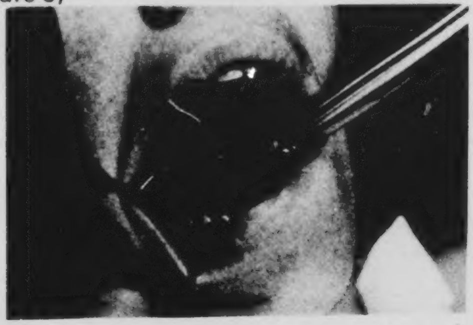
FIGURE 5



JOB SHEET #2

G. Retract tongue lingually (between tongue and teeth) while dentist retracts lips (Figure 6)

FIGURE 6



H. Practice holding the tongue from right and left until you can hold the tongue with ease

MUSCULAR SYSTEM
UNIT V

JOB SHEET #3--PERFORM FINGER DEXTERITY EXERCISE

I. Equipment

   A. Pen grip dental instruments

   B. Flat surface, such as desk or table

II. Procedure

   A. Spread fingers as far apart as possible; hold 15 seconds

   B. Clench fingers (make fist) as tight as possible; hold 15 seconds

   C. Repeat

   D. Rest

   E. Spread fingers on desk and push from wrist and shoulder area

   F. Spread fingers on desk and pull down as hard as possible

   G. Push with fingertip, using individual fingers one at a time, on top of desk and turn as far as possible each way

   H. Bend individual fingers backward and forward and as far as possible

   I. Clasp fingers together and push out and then in (Figures 1 and 2)

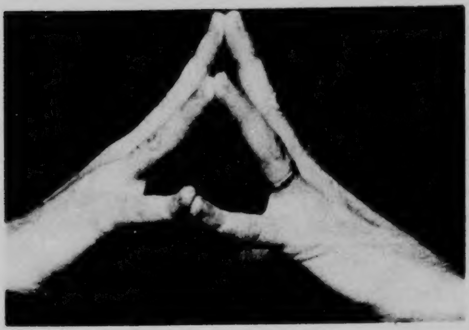


FIGURE 1

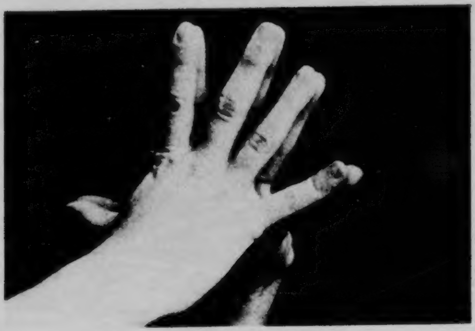


FIGURE 2

   J. Twirl instruments between fingers, moving from top to bottom, then bottom to top

MUSCULAR SYSTEM
UNIT V

TEST

NAME______________________________ SCORE____________________

1. Match the terms on the right to the correct definitions by placing the correct numbers in the blanks provided.

______a. Fibrous, nonelastic tissue cords which connect muscle to bone

______b. Wasting away or degeneration of a muscle

______c. Normal state of slight contraction of all muscles

______d. External origin

______e. Movable attachment where effect of movement is produced

______f. Ability of a muscle to return to its original length after stretching

______g. Fixed attachment of muscle which serves as a basis of action

______h. Supporting structure

______i. Fibrous tissues connecting or supporting two or more bones, cartilages or other structures

______j. Muscle which counteracts with a prime mover

______k. Main part of muscle

1. Extrinsic
2. Pillar
3. Antagonist
4. Atrophy
5. Body (belly)
6. Insertion
7. Origin
8. Tendons
9. Ligaments
10. Elasticity
11. Tonus

2. Name major functions of muscles.

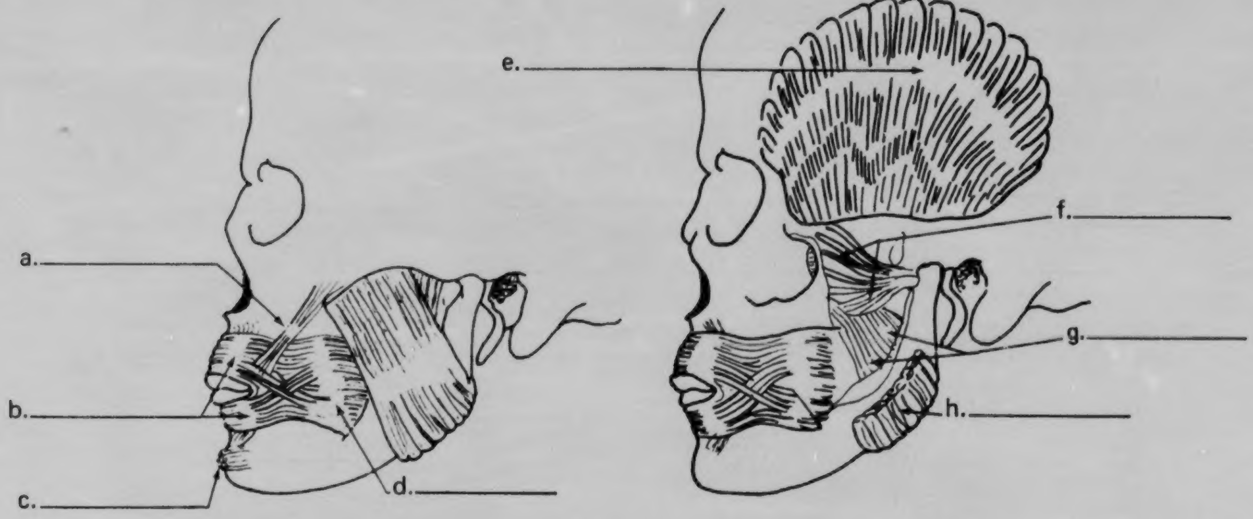
a. ____

b. ____

c. ____

d. ____

3. Identify the major muscles of mastication and facial expression. Write the correct terms in the blanks provided.



External Pterygoid
Temporal
Buccinator
Mentalis
Zygomatic Major
Internal Pterygoid
Orbicularis Oris
Masseter

4. Match the major muscles of mastication and facial expression to the correct functions. Place the correct numbers in the blanks provided. Some blanks may have more than one answer.

_____a. Acts to close jaw

_____b. Aids in closing jaw

_____c. Aids in opening and protruding jaw

_____d. Compresses cheek, holds food in contact, and retracts angle of mouth

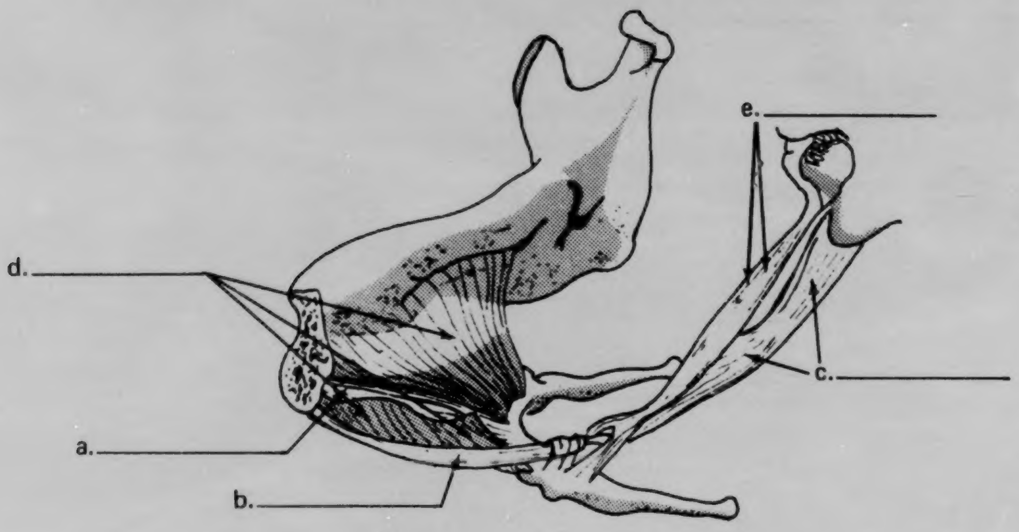
_____e. Closes and protrudes lips

_____f. Raises and wrinkles skin of the chin and pushes up lower lip

_____g. Draws angle of the mouth upward and backward

1. External pterygoid
2. Buccinator
3. Orbicularis oris
4. Zygomatic major
5. Internal pterygoid
6. Mentalis
7. Temporal
8. Masseter

5. Identify muscles of the floor of the mouth. Write the correct names in the blanks provided.



Mylohoid	
Digastric Anterior	Digastric Posterior
Geniohyoid	Stylohyoid

6. Complete the following chart on the functions of the muscles of the floor of the mouth.

Muscles	Functions
Digastric	a. __________ b. __________ c. __________
d.__________	Aids in fixing the hyoid bone Aids in forming the floor of the mouth
e.__________	Draws the hyoid forward Depresses the jaw when the hyoid is fixed
Mylohyoid	f.__________ g.__________ h.__________

7. Distinguish between the characteristics of the types of major posterior muscles of the mouth. Place an "X" in front of statements describing the palatoglossus muscles.

______a. Raises the back of the tongue and narrows the fauces

______b. Forms the posterior pillar of the fauces

______c. Originates in the soft palate

______d. Inserts into the side of the tongue

______e. Forms the anterior pillar of the fauces

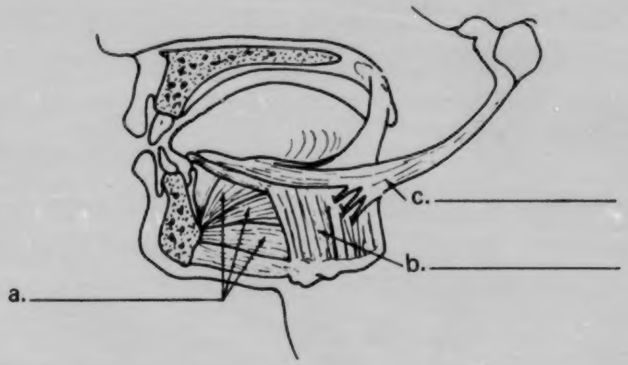
______f. Serves to narrow the fauces and helps to shut off the nasopharynx

8. Identify the extrinsic muscles of the tongue. Write the correct names in the blanks provided.

Hyoglossus

Styloglossus

Genioglossus



9. Identify selected skeletal muscles of the head and neck by writing the correct names in the blanks provided.

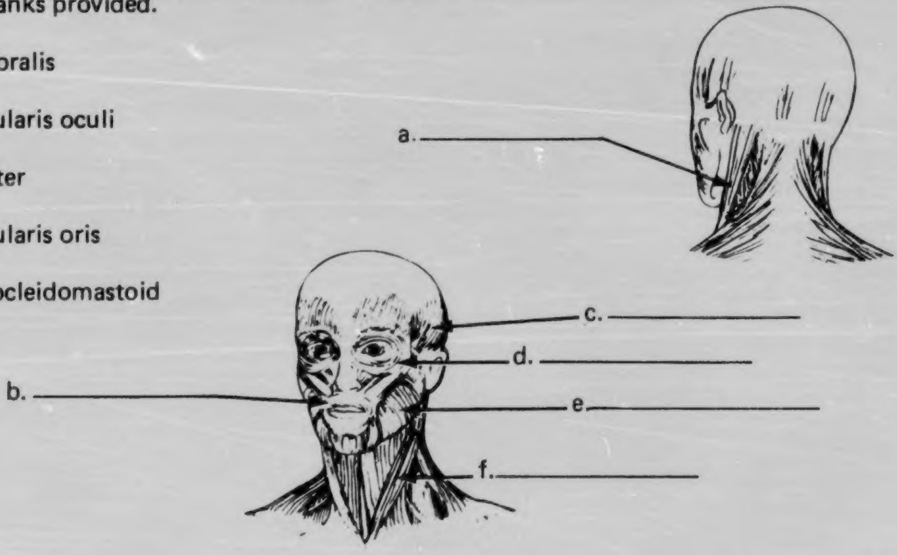
Temporalis

Orbicularis oculi

Masseter

Orbicularis oris

Sternocleidomastoid



10. Observe muscles in action.

11. Make an exercise plan.

12. Demonstrate the ability to:

    a. Use muscles of mastication to check occlusion.

    b. Retract tongue and cheek muscles.

    c. Perform finger dexterity exercise.

    (NOTE: If activities 10-12 have not been finished before the test, ask your instructor when they should be completed.)

MUSCULAR SYSTEM
UNIT V

ANSWERS TO TEST

1. a. 8
   b. 4
   c. 11
   d. 1
   e. 6
   f. 10
   g. 7
   h. 2
   i. 9
   j. 3
   k. 5

2. a. Communication
   b. Production of body heat
   c. Movement of body
   d. Posture

3. a. Zygomatic major
   b. Orbicularis oris
   c. Mentalis
   d. Buccinator
   e. Temporal
   f. External pterygoid
   g. Internal pterygoid
   h. Masseter

4. a. 7, 8
   b. 5
   c. 1
   d. 2
   e. 3
   f. 6
   g. 4

5. a. Geniohyoid
   b. Digastric anterior
   c. Digastric posterior
   d. Mylohyoid
   e. Stylohyoid

6. a. Posterior body helps to fix hyoid bone
   - b. Anterior body depresses the jaw
   - c. Both bodies aid in forming the floor of the mouth
   - d. Stylohyoid
   - e. Geniohyoid
   - f. Elevates the tongue
   - g. Depresses the jaw
   - h. Aids in forming the floor of the mouth
7. a, c, d, e
8. a. Genioglossus
   - b. Hyoglossus
   - c. Styloglossus
9. a. Sternocleidomastoid
   - b. Orbicularis oris
   - c. Temporalis
   - d. Orbicularis oculi
   - e. Masseter
   - f. Sternocleidomastoid
10. Evaluated to satisfaction of instructor
11. Evaluated to satisfaction of instructor
12. Performance skills evaluated to satisfaction of instructor

SINUSES, ORAL CAVITY AND SALIVARY GLANDS
UNIT VI

UNIT OBJECTIVE

After completion of this unit, the student should be able to describe structures and landmarks of the oral cavity, prepare and seat patient, and assist in control of moisture. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with sinuses, oral cavity and salivary glands to the correct definitions.
2. Identify paranasal sinuses.
3. Select from a list functions of paranasal sinuses.
4. Select from a list symptoms of a maxillary sinus infection.
5. Identify structures and landmarks of the oral cavity.
6. Identify the sutures of the maxillary palate.
7. Distinguish between functions of the main parts of the oral cavity.
8. Identify the papillae of the tongue.
9. Match types of mucosa of the oral cavity to the correct descriptions.
10. Identify major salivary glands and ducts.
11. List functions of the salivary glands not related to chemical digestion.
12. Select from a list stimuli that increase secretions of salivary glands.
13. Distinguish between characteristics of the major salivary glands.
14. Demonstrate the ability to:
    a. Prepare and seat patient.
    b. Control moisture.
    c. Mount bite-wing film.
    d. Mount periapical films (adult).

SINUSES, ORAL CAVITY AND SALIVARY GLANDS
UNIT VI

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information and job sheets.

   C. Make transparencies.

   D. Order film.

   E. Discuss unit and specific objectives.

   F. Discuss information and job sheets.

   G. Provide student with equipment for Job Sheets #1 and #2.

   H. Demonstrate preparing and seating patient.

   I. Demonstrate control of moisture.

   J. Have students examine their mouths to identify landmarks.

      Examples: Mucosa membranes, frenums, papilla of the tongue

   K. Point out sinus landmarks on X-ray film.

      (NOTE: If you do not have any old film to use, ask your dentist to save some that would otherwise be discarded.)

   L. Demonstrate methods of protecting equipment.

      Examples: Neck chains, needle holders, hemostat locking pliers

   M. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Paranasal Sinuses

      2. TM 2--Structures and Landmarks of the Oral Cavity

      3. TM 3--Sutures of the Maxillary Palate

      4. TM 4--Papillae of the Tongue

5. TM 5--Salivary Glands and Ducts

D. Job sheets

1. Job Sheet #1--Prepare and Seat Patient

2. Job Sheet #2--Control Moisture

3. Job Sheet #3--Mount Bite-Wing Film

4. Job Sheet #4--Mount Periapical Films (Adult)

E. Test

F. Answers to test

III. Unit references:

A. Schwarzrock, Shirley Pratt, and Jensen, James R. *Effective Dental Assisting.* Dubuque, Iowa: Wm. C. Brown Co., 1975.

B. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia, Pennsylvania: W. B. Saunders Co., 1976.

C. Dunn, Martin J., and Shapiro, Cindy Zion. *Dental Anatomy: Head and Neck Anatomy.* Baltimore: Williams and Wilkins Co., 1975.

D. Anderson, Pauline C. *The Dental Assistant.* Albany, New York: Delmar Publishers/Litton Educational Publishing, Inc., 1974.

IV. Film--"Anatomical Landmarks of the Oral Inspection." Cassette, 58 color slides, 16 min., University of Maryland. Available from University of Maryland, School of Dentistry, 666 West Baltimore St., Baltimore, MD 21201. Attention: Dorothy Britt.

SINUSES, ORAL CAVITY AND SALIVARY GALNDS
UNIT VI

INFORMATION SHEET

I. Terms and definitions

A. Paranasal sinuses--Air cells in the bones above and on each side of the nasal cavities

B. Meatus--Opening or passage in the nose

C. Fauces--Space between the oral cavity and oropharynx

D. Pillars of the fauces--Two mucous folds on either side of the fauces which enclose the palatine tonsils

E. Vestibule--Space or cavity at the entrance to another structure

(NOTE: That part of the oral cavity between the teeth and the cheeks and lips will be referred to as the vestibule.)

F. Mouth cavity proper--Inner or larger part of oral cavity, usually filled with the tongue

G. Canal--Relatively narrow tubular passage

H. Frenum--Weblike fold of the mucous membrane that limits the movements of an organ or part

I. Lingual frenum--Tissue which connects the undersurface of the tongue with the floor of the mouth

J. Rugae--Series of mucosal ridges which occur on the anterior portion of the hard palate just behind the maxillary incisors

K. Gag reflex--Protective mechanism located in the posterior region of the mouth

L. Vermillion border--Zone of transition from skin to mucous membrane

M. Dorsum--Top surface of the tongue

N. Gland--Organ that produces a specific product or secretion

O. Duct--Canal or passage for fluid

P. Oral mucosa--Mucous membrane that lines the oral cavity

Q. Saliva--Blend of secretions of major and minor salivary glands

R. Secretion--Biological explosion of material, chemically modified by a cell to serve a purpose in body process

S. Expectoration--Act of spitting out

T. Calculus--Hard mass containing lime salts found in saliva

INFORMATION SHEET

II. Paranasal sinuses (Transparency 1)

- A. Frontal
- B. Sphenoid
- C. Maxillary
- D. Ethmoid
    - 1. Anterior
    - 2. Middle
    - 3. Posterior

(NOTE: The four pairs of sinuses are named the same as the bones in which they are located; although they are paired, they are commonly asymmetrical and also referred to as air cells.)

III. Functions of paranasal sinuses

- A. Lighten the bones of the skull
- B. Give tone to the voice
- C. Act as reserve chambers for warm air during process of respiration

    (NOTE: The warmed air from the sinuses is drawn into the lungs during inspiration.)

- D. Provide mucus

    (NOTE: The paranasal sinuses continue into the nasal cavity and are covered with mucous membranes.)

IV. Symptoms of a maxillary sinus infection

- A. Tenderness in the maxillary sinus area
- B. Swollen facial tissue
- C. Pressure when teeth are in occlusion

    (NOTE: The sphenoid sinuses are near the optic nerves; an infection here can be damaging to vision.)

V. Structures and landmarks of the oral cavity (Transparency 2)

- A. Labial frenum (upper)
- B. Hard palate

INFORMATION SHEET

- C. Soft palate
- D. Maxillary tuberosity
- E. Retromolar area
- F. Gingivae
- G. Labial frenum (lower)
- H. Lingual frenum
- I. Anterior pillar of fauces
- J. Palatine tonsil
- K. Posterior pillar of fauces
- L. Uvula

VI. Sutures of the maxillary palate (Transparency 3)

- A. Median palatine suture
- B. Transverse palatine suture

VII. Functions of main parts of the oral cavity

- A. Lips
    1. Aid in admission of food and liquid
    2. Guard mouth against excessively hot and cold substances
    3. Keep food and saliva from escaping
    4. Important in speech
- B. Cheeks
    1. Form the side of the face
    2. Prevent food from escaping
    3. Aid in maintaining position of the teeth
- C. Tongue
    1. Aids in transfer of food
    2. Aids in mixing food with saliva
    3. Aids in cleansing mouth
    4. Aids in speech

INFORMATION SHEET

D. Hard palate

1. Aids tongue in preparation of foods
2. Aids in first phase of swallowing
3. Determines texture and temperature of food

E. Teeth

1. Tear and masticate food
2. Aid in swallowing
3. Aid in formation of speech sounds
4. Contribute to good appearance

(NOTE: The teeth are positioned in the alveolar processes of the maxillary and mandibular arches, which are placed between two sets of contrasting muscles or those of the tongue, lips, and cheeks.)

F. Soft palate

1. Aids in swallowing
2. Aids in speech

(NOTE: These functions are produced because the soft palate is lifted upward and back to meet the posterior pharyngeal wall; this blocks the entrance to the nasopharynx.)

VIII. Papillae of the tongue (Transparency 4)

A. Filiform

B. Fungiform

C. Vallate

IX. Types of mucosa of the oral cavity

A. Lining mucosa--Covers the inside of the cheeks, vestibule, lips, inner surface of tongue, and soft palate

(NOTE: Beneath the lining mucosa is a layer of tissue which contains the blood vessels and nerves, known as the submucosa.)

B. Specialized mucosa--Covers the dorsum of the tongue; in posterior acts as taste buds

(NOTE: The submucosa lies below the specialized mucosa.)

INFORMATION SHEET

C. Masticatory mucosa--Covers the gingivae and hard palate

(NOTE: This tissue is affixed to the bone to form a tougher epithelial surface, as it must withstand trauma of mastication. There is no submucosa below the masticatory mucosa.)

X. Major salivary glands and ducts (Transparency 5)

A. Parotid gland (main body)

(NOTE: The parotid gland is the gland that is greatly affected by mumps.)

B. Accessory parotid gland

C. Submandibular gland

D. Sublingual gland

E. Stenson's duct

F. Wharton's duct

XI. Functions of salivary glands not related to chemical digestion

A. Activate taste buds

B. Protect lining of mouth by producing saliva

C. Aid in speech by keeping oral mucosa and teeth moist

D. Lubricate food and aid in swallowing

XII. Stimuli that increase secretions of salivary glands

A. Touching of the oral mucosa

B. Sight and smell

C. Thought of food

XIII. Characteristics of major salivary glands (Transparency 5)

A. Sublingual glands

1. Located in floor of mouth on either side of anterior base of tongue

2. Secrete mucus, a slimy, gluelike secretion

3. Enter mouth through Bartholin's duct, which also opens on sublingual caruncle

INFORMATION SHEET

B. Submandibular glands

1. Located on inner surface of mandible and extend downward

2. Secrete mucus and serous

3. Open into mouth through Wharton's duct

(NOTE: Wharton's duct is in a prominence called submaxillary caruncle, located on the forward midline of the floor of the mouth near the lingual frenum. The submandibular gland is also called the submaxillary gland, and Wharton's duct is also called the submandibular duct. Bartholin's duct may join Wharton's duct to enter the mouth together or open directly into the floor of the mouth.)

C. Parotid glands

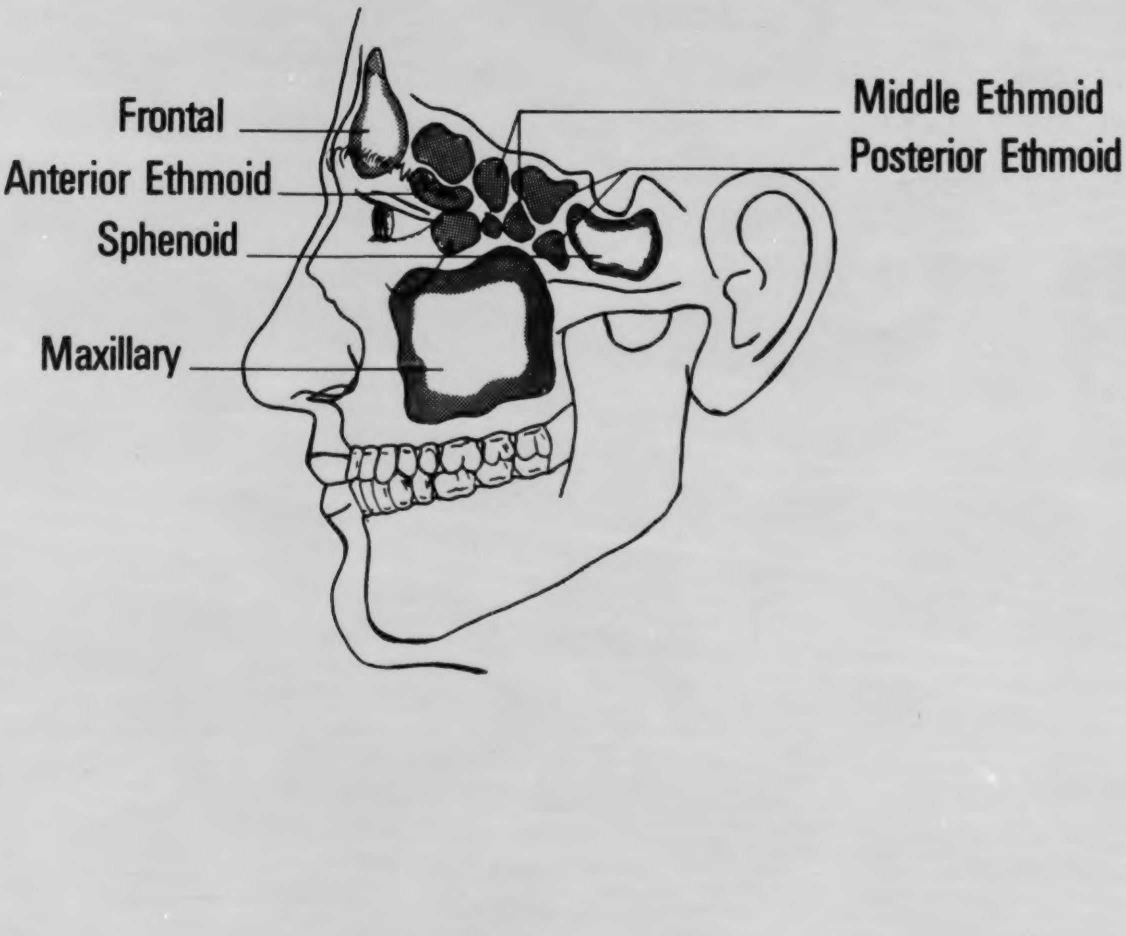
1. Located in front of and below ear

2. Secrete serous, a clear liquid

3. Enter mouth through Stenson's duct, located opposite buccal surface of upper second molar

(NOTE: There are also numerous small ducts, such as ducts of Rivinus, that are involved with the salivary glands.)

Paranasal Sinuses


Frontal
Anterior Ethmoid
Sphenoid
Maxillary
Middle Ethmoid
Posterior Ethmoid

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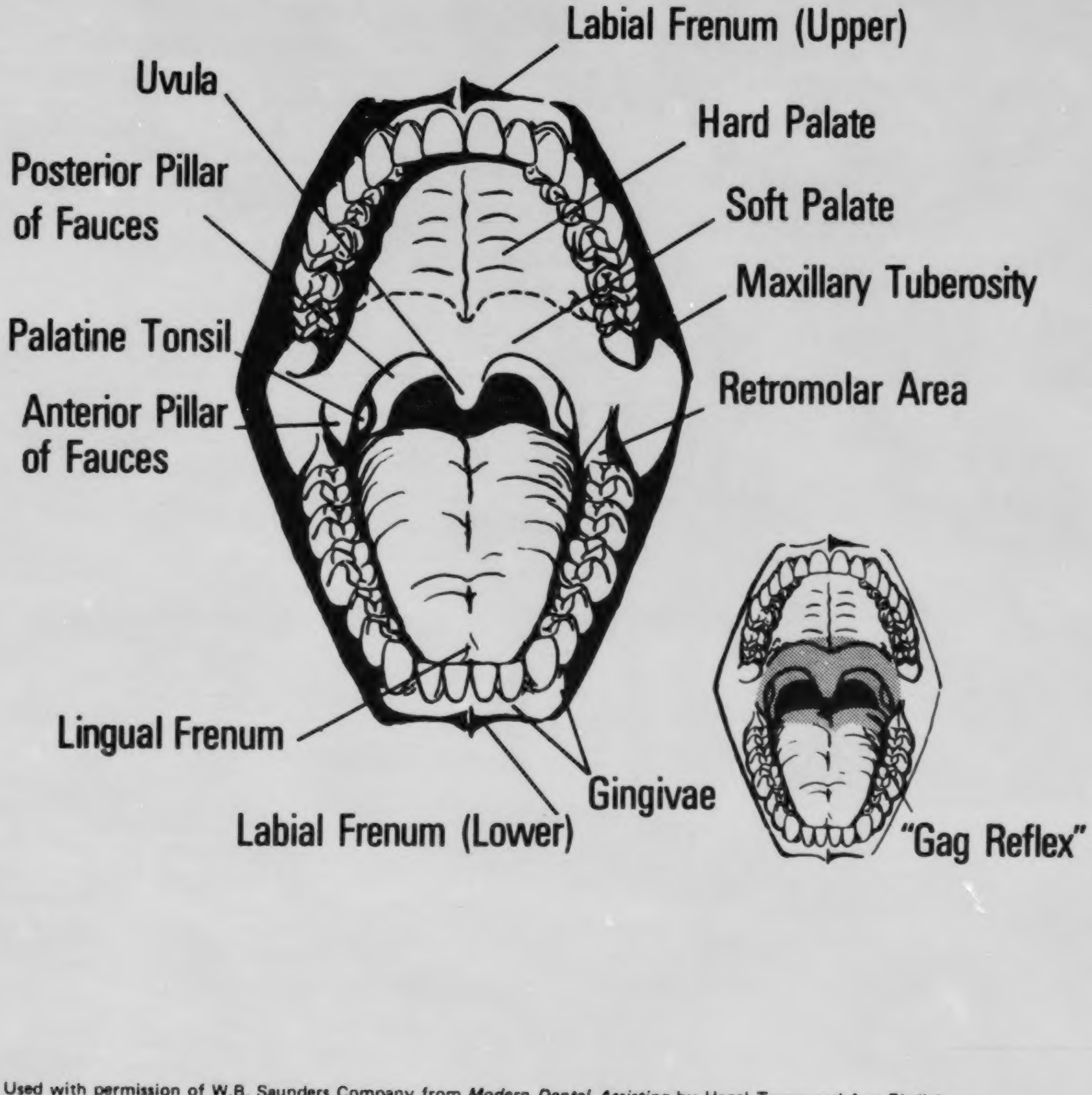
Structures and Landmarks of the Oral Cavity


Labial Frenum (Upper)
Uvula
Hard Palate
Posterior Pillar of Fauces
Soft Palate
Maxillary Tuberosity
Palatine Tonsil
Retromolar Area
Anterior Pillar of Fauces
Lingual Frenum
Gingivae
Labial Frenum (Lower)
"Gag Reflex"

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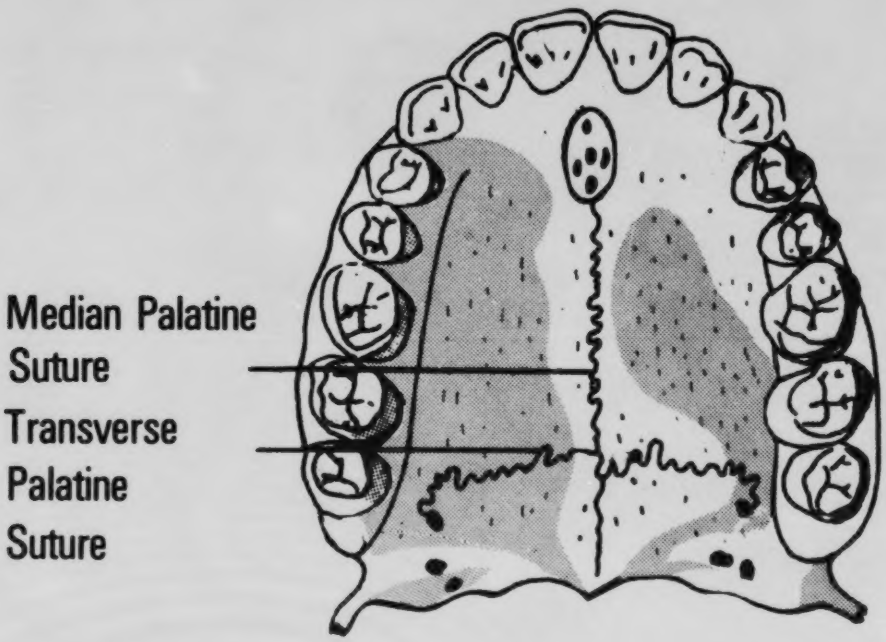
Sutures of the Maxillary Palate


Median Palatine Suture
Transverse Palatine Suture

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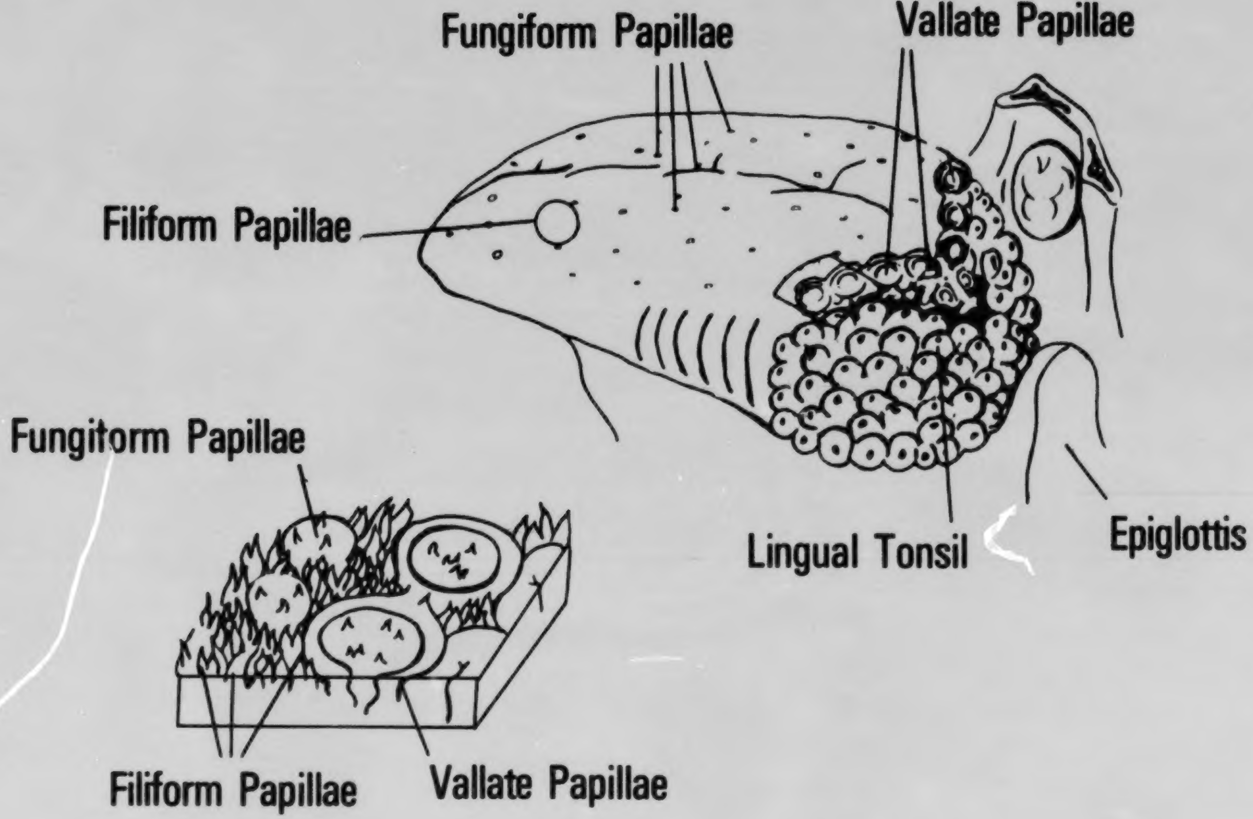
Papillae of the Tongue


Fungiform Papillae
Vallate Papillae
Filiform Papillae
Lingual Tonsil
Epiglottis
Fungiform Papillae
Filiform Papillae
Vallate Papillae

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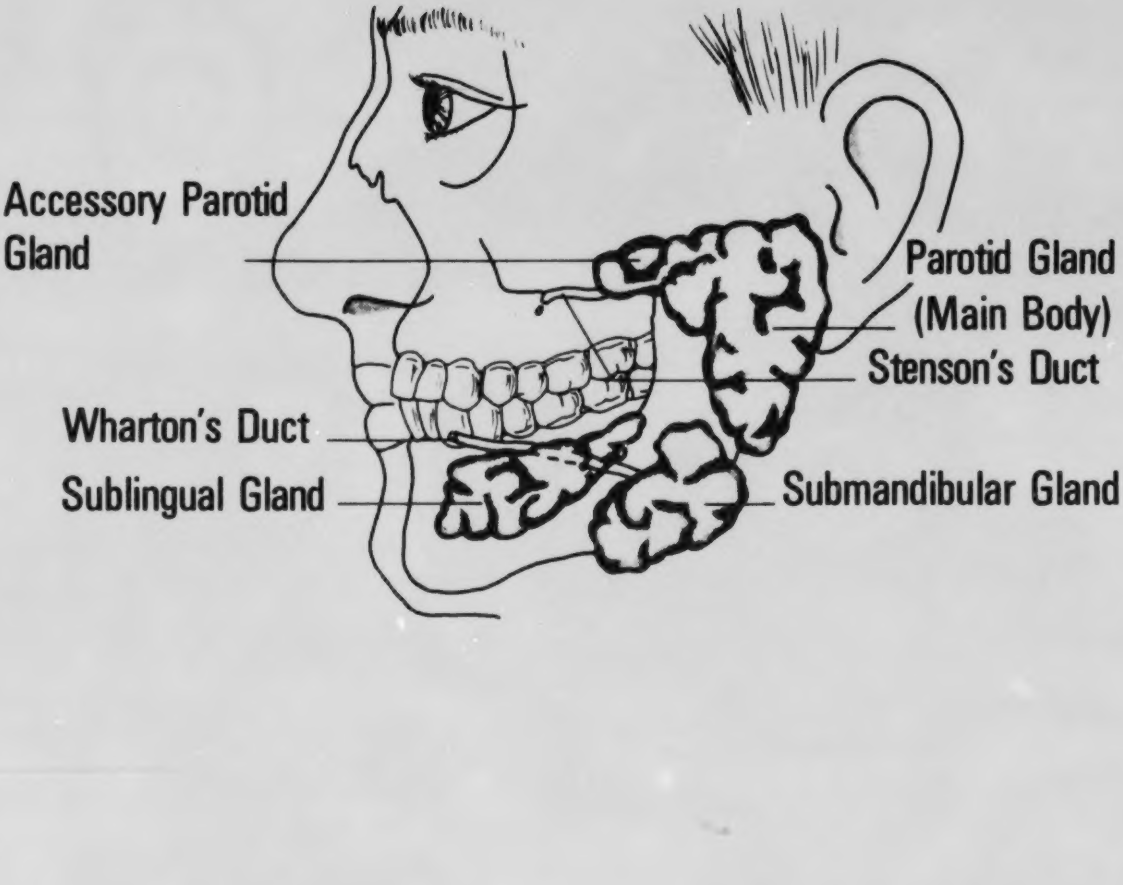
Salivary Glands and Ducts


Accessory Parotid Gland
Parotid Gland (Main Body)
Stenson's Duct
Wharton's Duct
Sublingual Gland
Submandibular Gland

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SINUSES, ORAL CAVITY AND SALIVARY GLANDS
UNIT VI

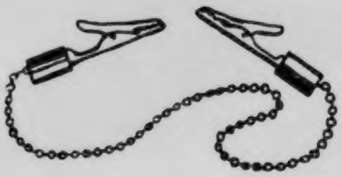
JOB SHEET #1--PREPARE AND SEAT PATIENT

(NOTE: It is essential that the operatory be spotlessly clean before a patient's arrival. It is the dental assistant's responsibility to create a comfortable and relaxed atmosphere for the patient. Practice seating a classmate and adjusting the dental chair.)

I. Equipment

   A. Neck chain (Figure 1)

FIGURE 1

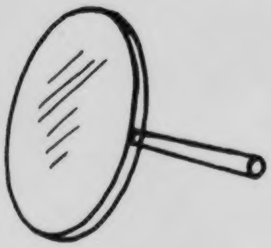


   B. Dental napkin

   C. Tissue

   D. Hand mirror (Figure 2)

FIGURE 2



II. Procedure

   A. Receiving patient

      1. Enter reception room and invite patient in

         Example: "Mrs. Black, please come in."

         (NOTE: Extend your hand if patient is a child.)

JOB SHEET #1

2. Address patient by name and guide to operatory

   (NOTE: Put personal items in view of the patient. *Never* leave a purse in the reception room.)

B. Seating patient

1. Assist patient to be seated

2. Adjust chair to make patient as comfortable as possible

3. Hand tissue to female patient and request removal of lipstick

4. Wash hands before placing dental napkin on patient

5. Place dental napkin on patient with neck chain

   (NOTE: On a cold day, warm chain in hands before placing on patient.)

6. Adjust light, directing it toward working area

   Examples: Maxillary, mandibular

7. Introduce new patients to dentist

   Example: "Mrs. Black, may I present Doctor Hefner?"

SINUSES, ORAL CAVITY AND SALIVARY GLANDS
UNIT VI

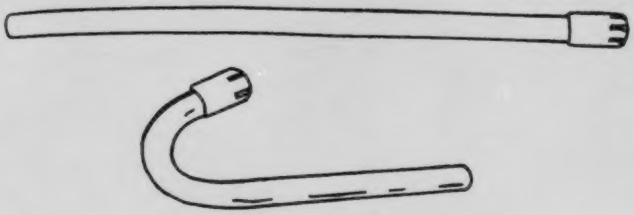
JOB SHEET #2--CONTROL MOISTURE

I. Equipment

  A. Cotton rolls

  B. Disposable saliva ejector (Figure 1)

FIGURE 1



  C. Tissue

  D. Operating pliers

  (NOTE: Use a classmate to act as patient. This procedure for controlling moisture is used only for short periods of time.)

  Example: Examination, polishing, cementing of inlays and crowns

II. Procedure

  A. Prepare patient

    1. Seat patient

    2. Adjust chair

    3. Wash hands

    4. Place dental napkin and chain on patient

  B. Place cotton rolls

    1. Instruct patient

    2. Retract patient's lips and cheeks, using forefinger of left hand

    3. Place cotton roll between gingiva and cheek surface (buccal)

    4. Place in upper and lower quadrant as indicated

JOB SHEET #2

C. Place saliva ejector

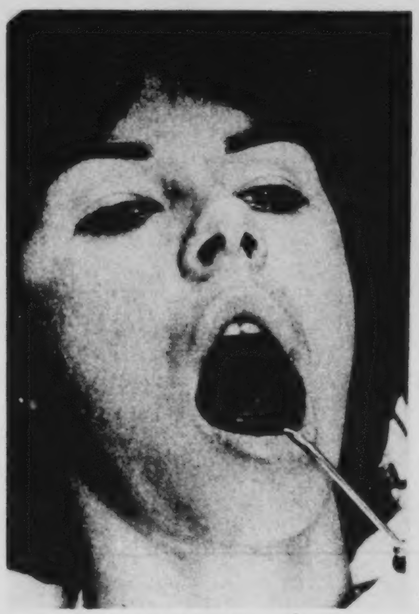
1. Attach saliva ejector to vacuum connection

2. Turn on suction

3. Place saliva ejector under tongue (lingual surface) (Figure 2)

   (NOTE: Saliva ejector rests on teeth, not soft tissues. Move saliva ejector from right to left as needed to control saliva.)

FIGURE 2



D. Remove saliva ejector and cotton rolls

1. Instruct patient

2. Remove saliva ejector from vacuum hose

   (NOTE: Place vacuum hose in proper place on machine; pull out ejector and place on tray.)

3. Retract cheek

4. Use operating pliers to remove cotton rolls

5. Discard rolls in waste receptacle

JOB SHEET #2

E. Dismiss patient

1. Turn off suction
2. Clean unit and supplies

   (NOTE: Use a cleaning agent on all surfaces of the unit, putting disposable items in waste receptacle and operating pliers in tray to be sterilized later.)

SINUSES, ORAL CAVITY AND SALIVARY GLANDS
UNIT VI

JOB SHEET #3--MOUNT BITE-WING FILM

(NOTE: It is the dental assistant's responsibility to correctly mount film. When mounting bite-wing film, keep in mind the center of the mount is the midline and the distal portion would be the right side of the dental arch. This view of the film represents the lingual [tongue] aspect.)

I. Materials

  A. 2- or 4-window mount (Figure 1)

FIGURE 1

  B. X-ray view box

  C. Bite-wing film

II. Procedure

  A. Determine right side of film

    1. Depressed dot toward you

    2. Bicuspid appears along the mesial (toward the midline) margin of film

    3. Molars appear along distal (away from midline) margin of film

    4. Occlusal line curves slightly upward from mesial to distal

  B. Hold film with depressed dot or shiny side toward you

  C. Hold mount in one hand and place film in mount with the other hand

  D. Mount the anterior (bicuspid area) film toward the center of the mount

  E. Mount the molar area toward the posterior margin

  (NOTE: Practice mounting other bite-wing film from your film reserve. Pass these films on to your classmates and receive more film.)

SINUSES, ORAL CAVITY AND SALIVARY GLANDS
UNIT VI

JOB SHEET#4--MOUNT PERIAPICAL FILMS (ADULT)

(NOTE: Periapical means "surrounding the root or apex of the tooth.")

I. Materials

- A. X-ray view box
- B. X-ray mounts
- C. Patient's X-rays

II. Procedure

- A. Check for landmarks
  1. Differences in roots

     Examples: Upper molars (3) roots, lower molars (2) roots

  2. Curve of the roots toward back (distal) of the mouth
  3. Visibility of sinus in the upper bicuspid and molar area

     (NOTE: Locate other landmarks learned in this unit.)

     Examples: Tuberosity, retromolar pad

- B. Hold film with depressed dot or shiny side of film toward you

  (NOTE: Do not confuse clip mark from the hanger with the dot.)

- C. Hold mount in one hand and place film in mount with the other hand
- D. Mount film in sequence as teeth appear in the mouth

  (NOTE: Some dentists prefer the film in reverse, with raised dot mounted toward assistant.)

DA - 277-B

SINUSES, ORAL CAVITY AND SALIVARY GLANDS
UNIT VI

TEST

NAME ______________________________ SCORE ___________________________

1. Match the terms associated with sinuses, oral cavity, and salivary glands to the correct definitions. Write the correct numbers in the blanks provided.

_____a. Air cells in the bones above and on each side of the nasal cavities

_____b. Opening or passage in the nose

_____c. Space between the oral cavity and oropharynx

_____d. Two mucous folds on either side of the fauces which enclose the palatine tonsils

_____e. Space or cavity at the entrance to another structure

_____f. Inner or larger part of oral cavity, usually filled with the tongue

_____g. Relatively narrow tubular passage

_____h. Tissue which connects the undersurface of the tongue with the floor of the mouth

_____i. Weblike fold on the mucous membrane that limits the movements of an organ or part

_____j. Series of mucosal ridges which occur on the anterior portion of the hard palate just behind the maxillary incisors

_____k. Protective mechanism located in the posterior region of the mouth

_____l. Zone of transition from skin to mucous membrane

_____m. Top surface of the tongue

1. Mouth cavity proper
2. Canal
3. Lingual frenum
4. Rugae
5. Vestibule
6. Dorsum
7. Vermillion border
8. Pillars of the fauces
9. Frenum
10. Meatus
11. Paranasal sinuses
12. Gag reflex
13. Fauces

______n. Organ that produces a specific product or secretion

______o. Canal or passage for fluid

______p. Mucous membrane that lines the oral cavity

______q. Blend of secretions of major and minor salivary glands

______r. Biological explosion of material, chemically modified by a cell to serve a purpose in body process

______s. Act of spitting out

______t. Hard mass containing lime salts found in saliva

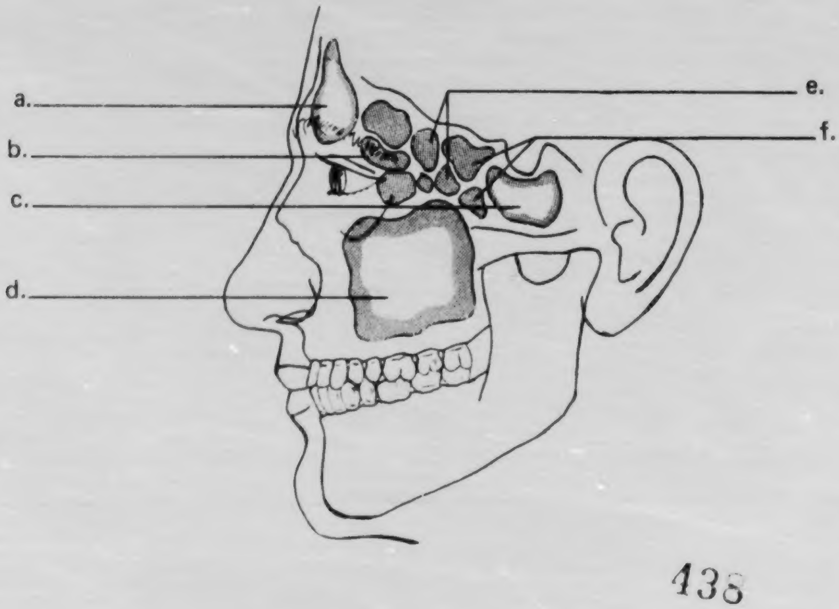
14. Calculus
15. Oral mucosa
16. Gland
17. Expectoration
18. Duct
19. Saliva
20. Secretion

2. Identify the paranasal sinuses. Write the correct names in the blanks provided.

Middle ethmoid
Sphenoid

Posterior ethmoid
Maxillary

Frontal
Anterior ethmoid



3. Select from the list below functions of the paranasal sinuses. Mark each correct answer with an "X."

    ______a. Contain blood vessels and nerves

    ______b. Provide mucus

    ______c. Fill many of the spaces with spongy bone

    ______d. Lighten the bones of the skull

    ______e. Give tone to the voice

    ______f. Act as reserve chambers for warm air during process of respiration

4. Select from the list below symptoms of a maxillary sinus infection. Mark each correct answer with an "X."

    ______a. Tenderness in the parotid gland

    ______b. Swollen facial tissue

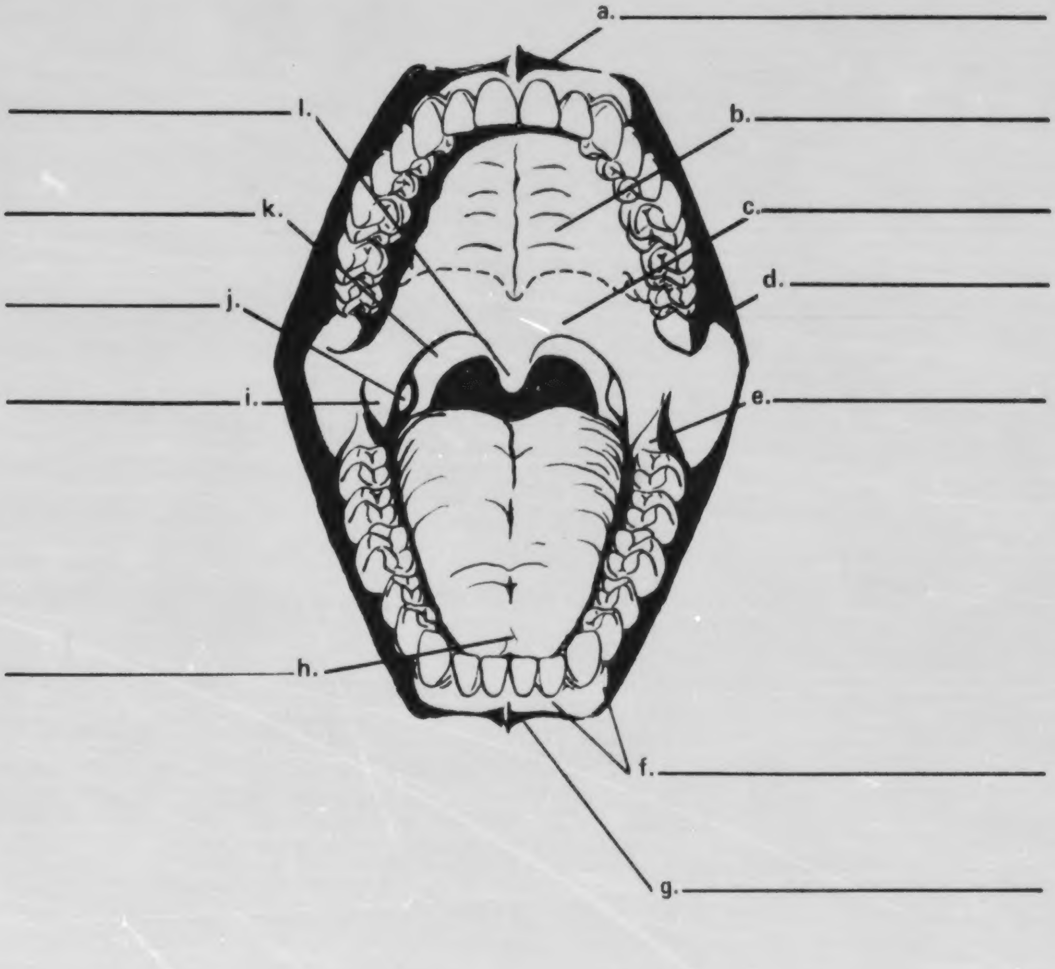
    ______c. Swelling of the cheek and neck

    ______d. Tenderness in the maxillary sinus area

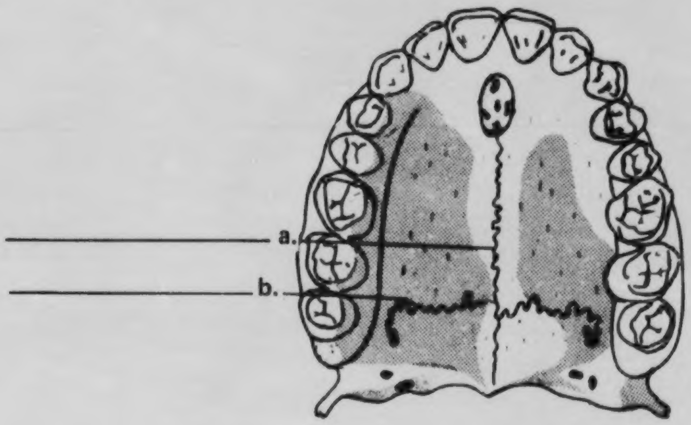
    ______e. Pressure when teeth are in occlusion

5. Identify the structures and landmarks of the oral cavity. Write the correct names in the blanks provided.

Gingivae
Lingual frenum
Soft palate
Labial frenum (upper)
Uvula
Retromolar area
Palatine tonsil
Hard palate
Maxillary tuberosity
Posterior pillar of fauces
Anterior pillar of fauces
Labial frenum (lower)



6. Identify sutures of the maxillary palate. Write the correct names in the blanks provided.



Median palatine suture Transverse palatine suture

7. Distinguish between functions of the main parts of the oral cavity. Write an "S" in front of statements describing functions of the soft palate, "T" for those of the teeth, "H" for hard palate, "To" for tongue, "C" for cheeks, and "L" for lips. There may be more than one correct answer for each blank.

______a. Aids in mixing food with saliva

______b. Prevent food from escaping

______c. Tear and masticates food

______d. Contribute to good appearance

______e. Aid in swallowing

______f. Determines texture and temperature of food

______g. Aids in maintaining position of the teeth

______h. Form the side of the face

______i. Aids in transfer of food

______j. Aids in speech

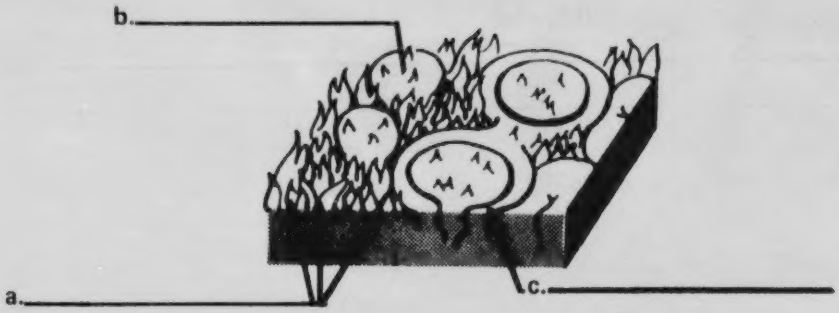
______k. Aids in cleansing mouth

______l. Aids tongue in preparation of foods

______m. Guard mouth against excessively hot and cold substances

______n. Important in speech

8. Identify the papillae of the tongue. Write the correct names in the blanks provided.



Vallate Filiform Fungiform

9. Match types of mucosa of the oral cavity to the correct descriptions.

_____a. Covers the inside of the cheeks, vestibule, lips, inner surface of tongue, and soft palate

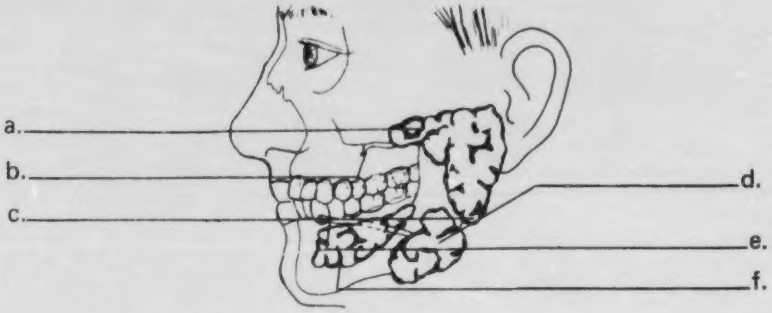
_____b. Covers the dorsum of the tongue; in posterior acts as taste buds

_____c. Covers the gingivae and hard palate

1. Specialized mucosa
2. Masticatory mucosa
3. Lining mucosa

10. Identify major salivary glands and ducts. Write the correct names in the blanks provided.

Accessory parotid gland
Stenson's duct
Submandibular gland
Sublingual gland
Parotid gland (main body)
Wharton's duct



11. List functions of the salivary glands not related to chemical digestion.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

12. Select stimuli that increase secretions of salivary glands. Mark each correct answer with an "X."

_____a. Sight and smell

_____b. Pressure when teeth are in occlusion

_____c. Thought of food

_____d. Romantic voice

_____e. Touching of the oral mucosa

_____f. Food escaping from mouth

13. Distinguish between characteristics of major salivary glands. Write an "SL" for characteristics of sublingual glands, an "SM" for characteristics of submandibular glands, and a "P" for characteristics of parotid glands.

_____a. Open into mouth through Wharton's duct

_____b. Secrete mucus, a slimy, gluelike secretion

_____c. Enter mouth through Bartholin's duct, which also opens on sublingual caruncle

_____d. Secrete serous, a clear liquid

_____e. Located on inner surface of mandible and extend downward

_____f. Located in floor of mouth on either side of anterior base of tongue

_____g. Located in front of and below ear

_____h. Secrete mucus and serous

_____i. Enter mouth through Stenson's duct, located opposite buccal surface of upper second molar

14. Demonstrate the ability to:
    a. Prepare and seat patient.
    b. Control moisture.
    c. Mount bite-wing film.
    d. Mount periapical films (adult).

(NOTE: If the above activities have not been finished before the test, ask your instructor when they should be completed.)

SINUSES, ORAL CAVITY AND SALIVARY GLANDS
UNIT VI

ANSWERS TO TEST

1. a. 11
   b. 10
   c. 13
   d. 8
   e. 5
   f. 1
   g. 2
   h. 3
   i. 9
   j. 4
   k. 12
   l. 7
   m. 6
   n. 16
   o. 18
   p. 15
   q. 19
   r. 20
   s. 17
   t. 14

2. a. Frontal
   b. Anterior ethmoid
   c. Sphenoid
   d. Maxillary
   e. Middle ethmoid
   f. Posterior ethmoid

3. b, d, e, f

4. b, d, e

5. a. Labial frenum (upper)
   b. Hard palate
   c. Soft palate
   d. Maxillary tuberosity
   e. Retromolar area
   f. Gingivae
   g. Labial frenum (lower)
   h. Lingual frenum
   i. Anterior pillar of fauces
   j. Palatine tonsil
   k. Posterior pillar of fauces
   l. Uvula

6. a. Median palatine suture
   b. Transverse palatine suture

7. a. To
   b. L, C
   c. T
   d. T
   e. H, T, S
   f. H
   g. C
   h. C
   i. To
   j. S, T, To
   k. To
   l. H
   m. L
   n. L
8. a. Filiform
   b. Fungiform
   c. Vallate
9. a. 3
   b. 1
   c. 2
10. a. Accessory parotid gland
    b. Stenson's duct
    c. Parotid gland (main body)
    d. Submandibular gland
    e. Wharton's duct
    f. Sublingual gland
11. a. Activate taste buds
    b. Protect lining of mouth by producing saliva
    c. Aid in speech by keeping oral mucosa and teeth moist
    d. Lubricate food and aid in swallowing
12. a, c, e
13. a. SM
    b. SL

- d. P
- e. SM
- f. SL
- g. P
- h. SM
- i. P

14. Performance skills evaluated to satisfaction of instructor

HISTOMORPHOLOGY
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to use correct charting markings on dental records. The student should also be able to carve a tooth. This knowledge will be evidenced through completion of assignment and job sheets and a unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with histomorphology to the correct definitions.
2. Identify parts of a tooth and its supporting structures.
3. Match functions of main parts of a tooth to the correct descriptions.
4. Match terms associated with composition and formation of teeth to the correct definitions.
5. Match types of tooth abnormalities to the correct definitions.
6. Complete a chart of the approximate ages of tooth eruptions.
7. List teeth in deciduous dentition.
8. Select from a list functions of the deciduous teeth.
9. Label drawings of deciduous teeth using the correct method of numbering.
10. Identify teeth of permanent dentition.
11. Label a drawing of permanent teeth using the correct method of numbering.
12. Identify surfaces of teeth.
13. Match terms associated with surfaces of teeth to the correct descriptions.
14. Identify proximal surfaces and contact areas of teeth.
15. Write abbreviations used for single surfaces of teeth.
16. Write abbreviations used for group surfaces of teeth.
17. Match entry codes on a clinical dental chart to the correct meanings.
18. Chart a clinical dental chart using the correct methods of marking.

19. Identify landmarks of an individual tooth.
20. Identify fossa areas of a tooth.
21. Identify grooves and other landmarks of a tooth.
22. Identify ridges of a tooth.
23. Identify parts of a Boley gauge.
24. Write correct measurements on a Boley gauge.
25. Practice charting teeth.
26. Read the Boley gauge.
27. Demonstrate the ability to:
    a. Measure teeth.
    b. Layout and carve a tooth.

HISTOMORPHOLOGY
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

- A. Provide student with objective sheet.
- B. Provide student with information, assignment, and job sheets.
- C. Order film.
- D. Use film to introduce morphology and histology suggested in this unit.
- E. Lead a discussion on ways palate can be malformed, causing cleft lip and malformation of jaw relationship.
- F. Make transparencies.
- G. Discuss unit and specific objectives.

  (NOTE: It may be helpful to teach and test this unit in three sections--histomorphology, charting, and Boley gauge.)
- H. Discuss information, assignment, and job sheets.
- I. Assist student in the marking of dental chart in Assignment Sheet #1.
- J. Use Transparencies 5 and 6 to demonstrate charting cavities.

  (NOTE: This is a good method for showing all of the surfaces to mark as each student can view your demonstration.)
- K. Introduce student to other types of charting used in the dental offices, as well as different methods of charting deciduous teeth.

  (NOTE: Other types of charting will be introduced in later units of this book.)

  Examples: Use blue or red pencil for different types of cavities
- L. Demonstrate use of a Boley gauge.
- M. Demonstrate and discuss procedures outlined in job sheets.
- N. Explain to student that carving teeth in Job Sheet #2 increases dexterity and knowledge of tooth anatomy.)

  (NOTE: Use soap and different kind of wax for carving.)

O. Invite a pedodontist to speak to class.

Example: Operative differences in deciduous and permanent teeth--types of pulp restorations

P. Have students make a poster showing various teeth.

Example: Centrals, laterals, cuspids, molars

(NOTE: This may be used as a HOSA activity.)

Q. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters

1. TM 1--Dental Erosions
2. TM 2--Mandibular Teeth
3. TM 3--Maxillary Teeth
4. TM 4--Comparison Between Deciduous and Permanent Arches
5. TM 5--Permanent Teeth
6. TM 6--Deciduous Teeth
7. TM 7--Parts of a Boley Gauge

D. Assignment sheets

1. Assignment Sheet #1--Practice Charting Teeth
2. Assignment Sheet #2--Read the Boley Gauge

E. Answers to Assignment Sheet #2

F. Job sheets

1. Job Sheet #1--Measure Teeth
2. Job Sheet #2--Layout and Carve a Tooth

III. Unit references:

A. Young, Jack. *Outline of Oral and Dental Anatomy.* New York: Blakiston Div./McGraw-Hill Book Co., 1964.

B. Anderson, Pauline C. *The Dental Assistant*. Albany: Delmar Publishers/ Litton Educational Publishing, Inc. 1974.

C. Torres, Hazel O. and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W.B. Saunders Co., 1976.

IV. Slide/tape: "General Human Embryology." Available from Robert Boettcher, Lane Community College, 4000 E. 30th, Eugene, OR 97401.

(NOTE: This is a 45-minute presentation useful as an introduction to embryology of head and neck.)

V. Additional references:

(NOTE: The following organizations have a wide variety of dental instructional materials. Write for their catalogs.)

A. Health Science Learning Resources, University Media Resources, Univ. of Minnesota, Audiovisual Library, 3300 University Ave. NE, Minneapolis, MN 55418.

B. Quercus Corporation, 2768 Pineridge Rd, Castro Valley, CA 94546.

C. National Book Company, 333 NW Park Ave., 4th Floor, Portland, OR 97205.

HISTOMORPHOLOGY
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Embryology--Study of the first weeks of prenatal development

B. Histomorphology (oral)--Science which deals with structure, composition, form, and functions of tissues and teeth

(NOTE: Some knowledge of histomorphology [oral] is essential in order to be able to understand the effects of disease and various dental treatment procedures.)

C. Alveolar socket (alveolus)--Cavity (hole) within alveolar process in which roots of tooth are held in periodontal ligament

D. Interdermal septum--Bone separating roots of tooth

E. Gingiva--Mucous membrane which covers alveolar processes and surrounds teeth

F. Free gingiva--Gingiva which is higher than epithelial attachment, but not bound to underlying tissue

G. Gingival sulcus--Space between tooth and free margin of gingiva

H. Papilla (interdental papilla)--Gingival tissue located between two teeth

I. Succedaneous teeth--Permanent teeth which replace deciduous (primary) teeth

J. Pulp horn--Pulp which projects toward cusp tip and incisal edges

K. Exfoliation (shedding)--Loss of deciduous dentition

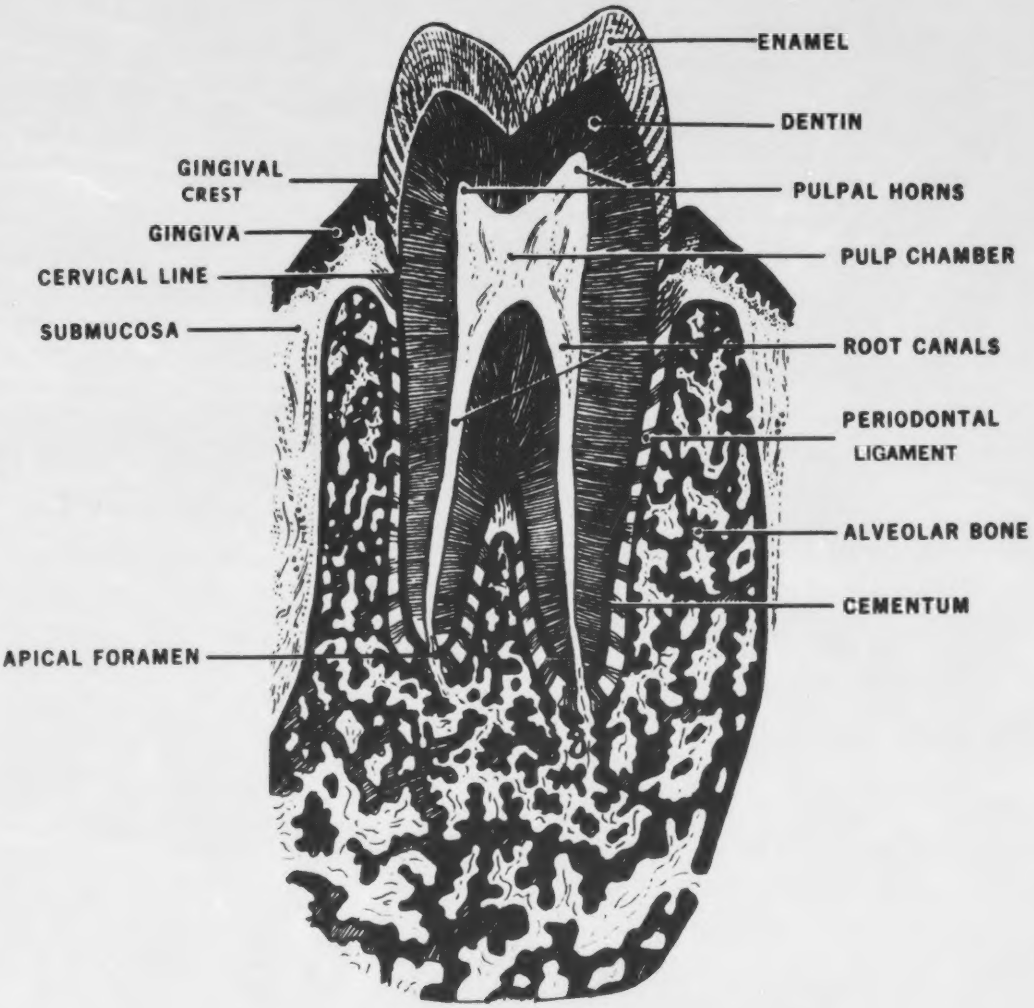
L. Fossa--Round or angular depression of varying size on surface of a tooth

M. Dentition--Entire array of teeth in jaw; natural teeth in position in the alveoli

N. Boley gauge--Tool used for measuring teeth

INFORMATION SHEET

II. Parts of a tooth and supporting structures


ENAMEL
DENTIN
GINGIVAL CREST
PULPAL HORNS
GINGIVA
PULP CHAMBER
CERVICAL LINE
SUBMUCOSA
ROOT CANALS
PERIODONTAL LIGAMENT
ALVEOLAR BONE
CEMENTUM
APICAL FORAMEN

From Zeisz, Robert C., and Nuckolls, James. *Dental Anatomy*. St. Louis, 1949, The C.V. Mosby Company.

INFORMATION SHEET

III. Functions of the main parts of a tooth

  A. Enamel--Serves as a protection for vital parts of a tooth

  B. Dentin--Serves as a thermal conductor and transmits pain stimuli

  C. Pulp--Aids in forming dentin; supplies nutrition to tooth; receives and transmits pain stimuli

  D. Cementum--Anchors teeth to bony sockets by attachments

  E. Periodontal ligament--Serves as anchoring ligament and as separating tissue

  F. Alveolar process--Supports teeth in their functional position in jaw

  G. Apex--Entry for nerves and blood vessels

IV. Terms associated with composition and formation of teeth

  A. Anatomic crown--Covers enamel and is exposed in oral cavity

  B. Anatomic root--Portion of root covered by cementum

  (NOTE: The root is embedded in a bony socket of the maxilla and mandible surrounded by soft tissue.)

  C. Cementoenamel junction (cervical line)--Lines junction of enamel and cementum of root

  D. Apex--Tip of the root

  (NOTE: The crown's outer layer is enamel, and its inner layer is dentin; the root's outer layer is cementum, and its inner layer is dentin.)

  E. Pulp cavity--Space in the central portion of the crown and roots filled with pulp tissue

  F. Pulp chamber--Found mainly in coronal (crown) portion

  G. Pulp canal (root canal)--Narrow passage or channel

  H. Apical foramen--Opening at end of roots for blood vessels and nerves to pass through

  I. Enamel--Calcified substance that covers entire crown of tooth

  (NOTE: Mature enamel has no further growth or repair.)

  J. Bifurcation--Division into two roots

INFORMATION SHEET

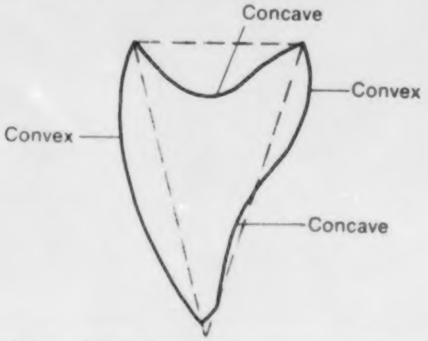
K. Trifurcation--Division into three roots

(NOTE: The maxillary molars have three roots and the mandibular molars have two roots.)

L. Dentin--Makes up bulk of tooth

M. Cementum--Covers roots of teeth

N. Concave--Surface curving inward



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O. Convex--Curved or rounded

V. Abnormalities of teeth

A. Abrasion--Wearing away of dental enamel by friction of a foreign body

(NOTE: The most common type of abrasion is caused by improper use of the toothbrush, such habits as opening bobby pins with teeth, and acid-forming food debris.)

B. Erosion--Superficial loss of enamel by chemical process that does not involve dental caries (Transparency 1)

(NOTE: The cause is believed to be sucking on lemons, too much grapefruit juice and colas.)

C. Black tooth--Appears as a single tooth in the mouth of a child due to the mother taking tetracycline during pregnancy

D. Supernumerary teeth--Teeth beyond normal number; extra teeth

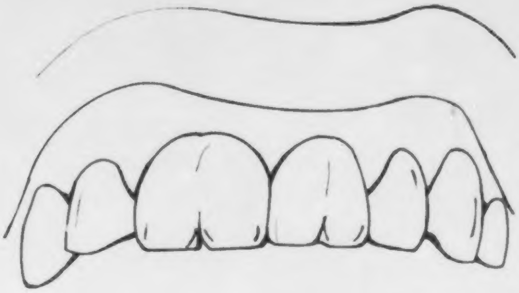
E. Malpositioned teeth--Teeth not within normal dental alignment

F. Cleft palate and cleft lip--Embryonic imperfections in closure of palate or lip

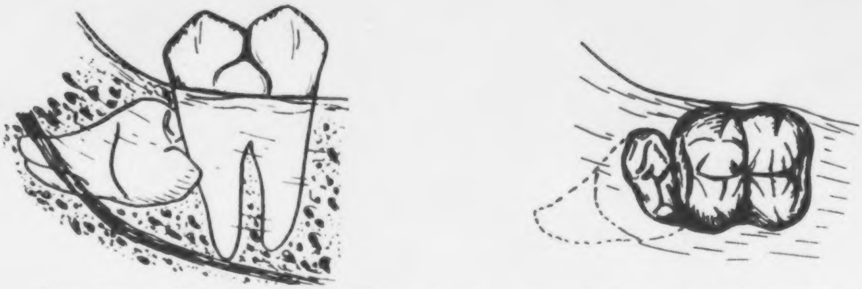
(NOTE: Clefts occur in about one in 700 births. The cause is not fully known, but is believed to occur during the early part of pregnancy.)

INFORMATION SHEET

G. Fusion--Joining together of dentin and/or enamel of two separate teeth



H. Impaction--Condition of being wedged in firmly



From *Outline of Oral and Dental Anatomy* by Jack Young. Copyright 1964 by McGraw-Hill Book Company. Used with permission of McGraw-Hill Book Company.

VI. Approximate ages of tooth eruptions

Eruption of Deciduous Teeth

Mandibular central incisors	6 months
Maxillary central incisors	7 1/2 months
Mandibular lateral incisors	7 months
Maxillary lateral incisors	9 months
First molars	12 to 14 months
Cuspids	16 to 18 months
Second molars	20 to 24 months

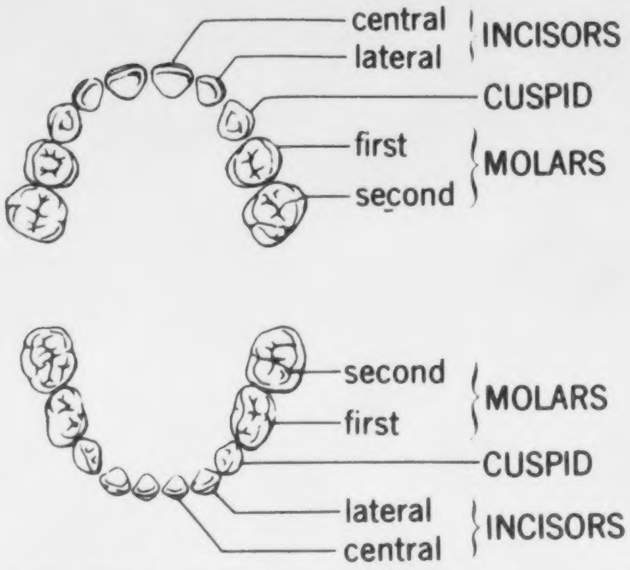
Eruption of Permanent Teeth

First molars	6 to 7 years
Central incisors	6 to 8 years
Lateral incisors	7 to 9 years
Cuspids	9 to 12 years
First bicuspids	10 to 12 years
Second bicuspids	11 to 13 years
Second molars	11 to 13 years
Third molars	17 to 21 years

INFORMATION SHEET

VII. Teeth in deciduous dentition

(NOTE: There are 20 teeth in deciduous dentition.)


central
lateral
INCISORS
CUSPID
first
second
MOLARS
second
first
MOLARS
CUSPID
lateral
central
INCISORS

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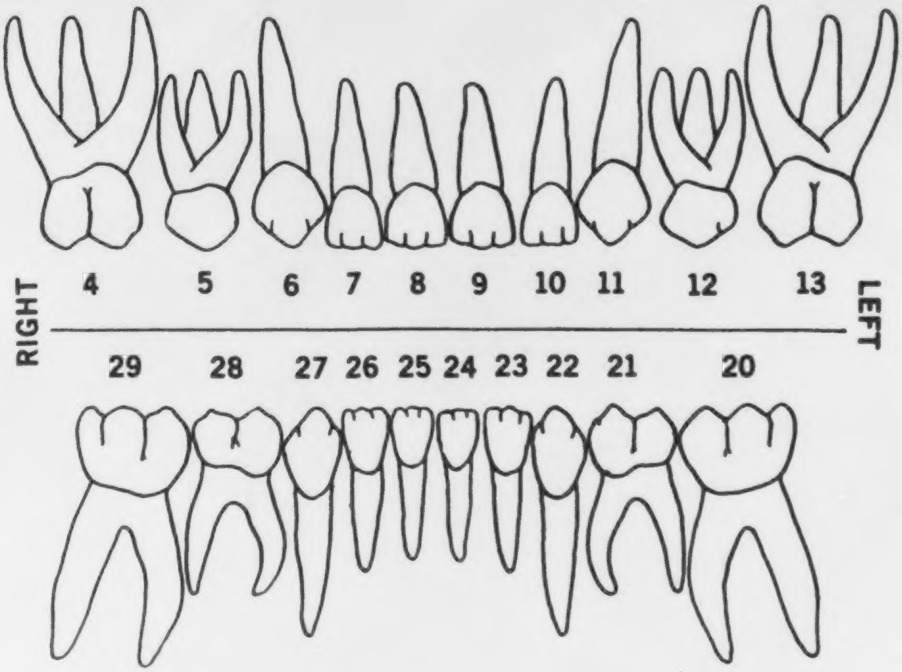
- A. Central incisors
- B. Lateral incisors
- C. Cuspids
- D. First molars
- E. Second molars

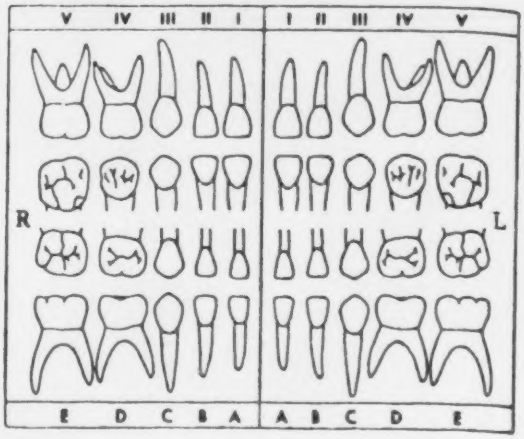
VIII. Functions of deciduous teeth

- A. Mastication (chewing)
- B. Speech development
- C. Maintain space
- D. Aesthetics (appearance)

INFORMATION SHEET

IX. Methods of numbering a clinical dental chart of deciduous teeth (Transparency 6)

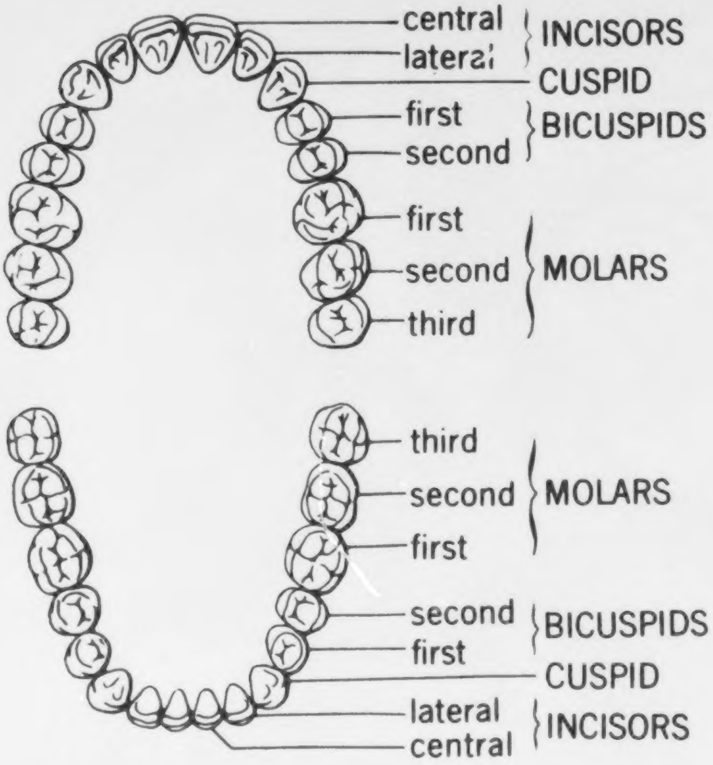

4
5
6
7
8
9
10
11
12
13
RIGHT
LEFT
29
28
27
26
25
24
23
22
21
20


V IV III II I
I II III IV V
R
L
E D C B A
A B C D E

INFORMATION SHEET

X. Teeth of permanent dentition (Transparencies 2 and 3)

(NOTE: There are thirty-two teeth in permanent dentition. The teeth are the same in the left and right quadrant. An easy way to learn the names of teeth is to learn four words, central, lateral, cuspid and molars, then add central, lateral 1st and 2nd bicuspids, and 1st, 2nd, and 3rd molars.)


central
lateral
INCISORS
CUSPID
first
second
BICUSPIDS
first
second
third
MOLARS
third
second
first
MOLARS
second
first
BICUSPIDS
CUSPID
lateral
central
INCISORS

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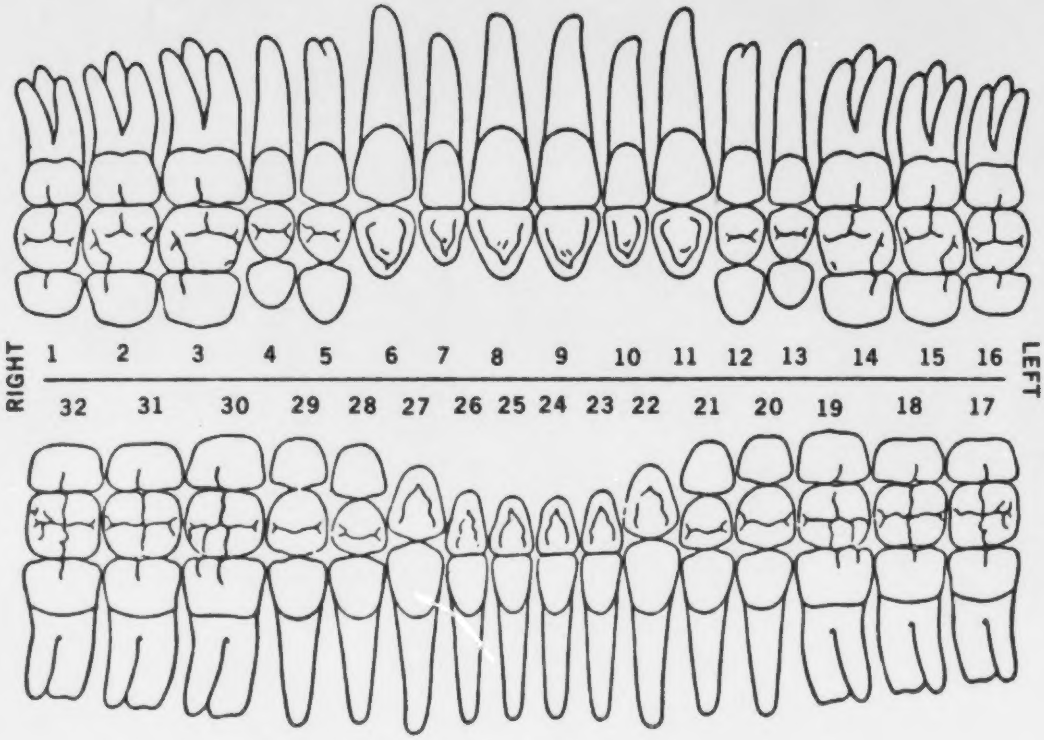
INFORMATION SHEET

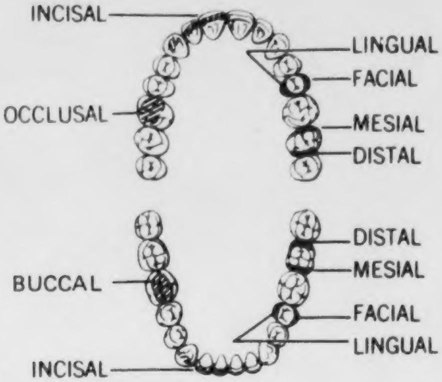
XI. Numbering a clinical dental chart of permanent teeth (Tranparency 5)

(NOTE: This method is called the Universal Numbering System which the A.D.A. officially adopted in 1968. There may be other methods used in dental offices but this method is used most often.)


RIGHT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
LEFT
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17

INFORMATION SHEET

XII. Surfaces of teeth (Transparency 4)


INCISAL
LINGUAL
FACIAL
OCCLUSAL
MESIAL
DISTAL
DISTAL
MESIAL
BUCCAL
FACIAL
LINGUAL
INCISAL

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XIII. Terms associated with surfaces of teeth

A. Occlusal--Relationship between chewing surfaces of maxillary and mandubular teeth

B. Lingual--Surfaces that are close to the tongue or tongue side of a tooth

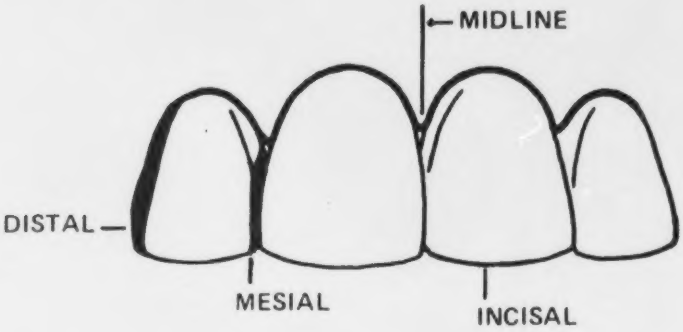
(NOTE: All teeth have a lingual surface.)

C. Facial (labial)--Toward the lips

D. Buccal--Toward the cheeks

E. Mesial--Toward the midline; anterior part of a tooth

F. Distal--Away from midline; posterior part of a tooth

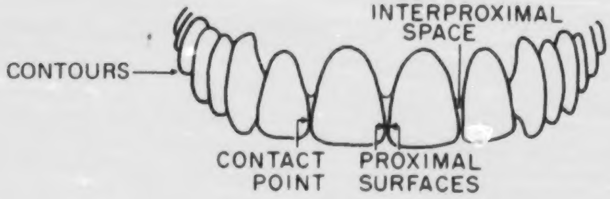

MIDLINE
DISTAL
MESIAL
INCISAL

INFORMATION SHEET

G. Incisal--Biting edge of a tooth

H. Posterior--Situated behind; to the back of a tooth

I. Anterior--Toward the front of a tooth


INTERPROXIMAL SPACE
CONTOURS
CONTACT POINT
PROXIMAL SURFACES

J. Proximal--Tooth surfaces that are next to one another

K. Interproximal--Space between proximal surfaces

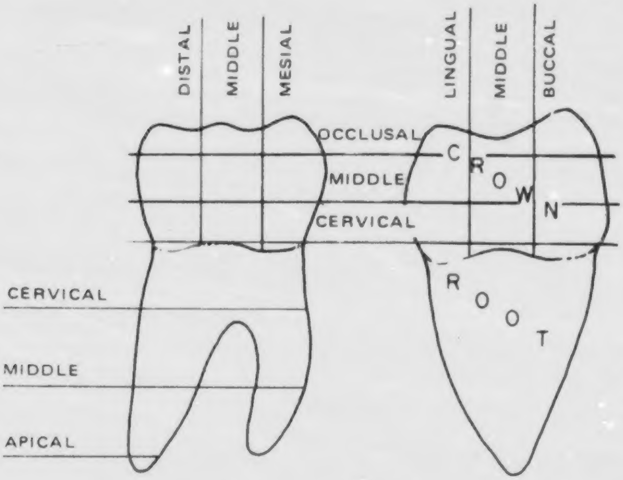
L. Contact area--Surfaces that actually touch each other

M. Contours--Curved surfaces of a tooth

(NOTE: Contours help keep teeth clean. All teeth have contours except fractured or worn teeth.)

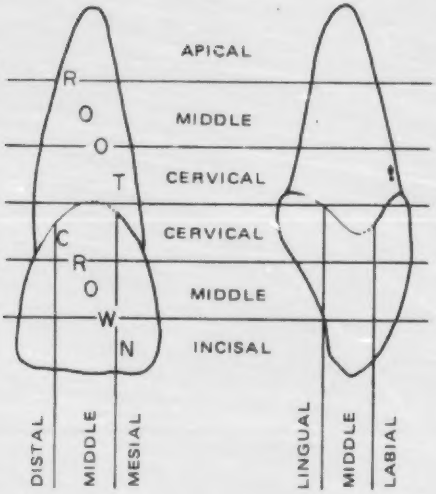
XIV. Proximal surfaces and contact areas of teeth

A. Molars


DISTAL
MIDDLE
MESIAL
LINGUAL
MIDDLE
BUCCAL
OCCLUSAL
MIDDLE
CERVICAL
CROWN
CERVICAL
MIDDLE
APICAL
ROOT

INFORMATION SHEET

B. Incisors


APICAL
MIDDLE
CERVICAL
CERVICAL
MIDDLE
INCISAL
ROOT
CROWN
DISTAL
MIDDLE
MESIAL
LINGUAL
MIDDLE
LABIAL

XV. Abbreviations for single surfaces of teeth

(NOTE: You will be required to write the location of surfaces named by your doctor during an oral examination.)

A. Incisal--I

B. Buccal--B

C. Distal--D

D. Lingual--L

E. Mesial--M

F. Occlusal--O

XVI. Abbreviations for group surfaces of teeth

(NOTE: When combining groups together, as cavities often do, terms take a uniform change.)

Example: distal and occlusal become disto-occlusal

A. Mesio-occlusal--MO

B. Disto-occlusal--DO

C. Mesio-occluso-distal--MOD

D. Mesio-incisal--MI

INFORMATION SHEET

E. Occluso-lingual--OL

F. Mesio-lingual--ML

G. Disto-lingual--DL

H. Mesio-buccal--MB

I. Disto-buccal--DB

XVII. Entry codes on a clinical dental chart

A. Extraction--X or Ext.

B. Missing--M or /

C. Amalgam--Amal

D. Silicate--Sili

E. Resin--R

F. Inlay--In

G. Foil--Fo

H. Porcelain inlay--PI

I. Gold--G

J. Crown--Cr.

K. Bridge--Br.

L. Porcelain jacket crown--PJC

M. Maxillary partial denture--MPD

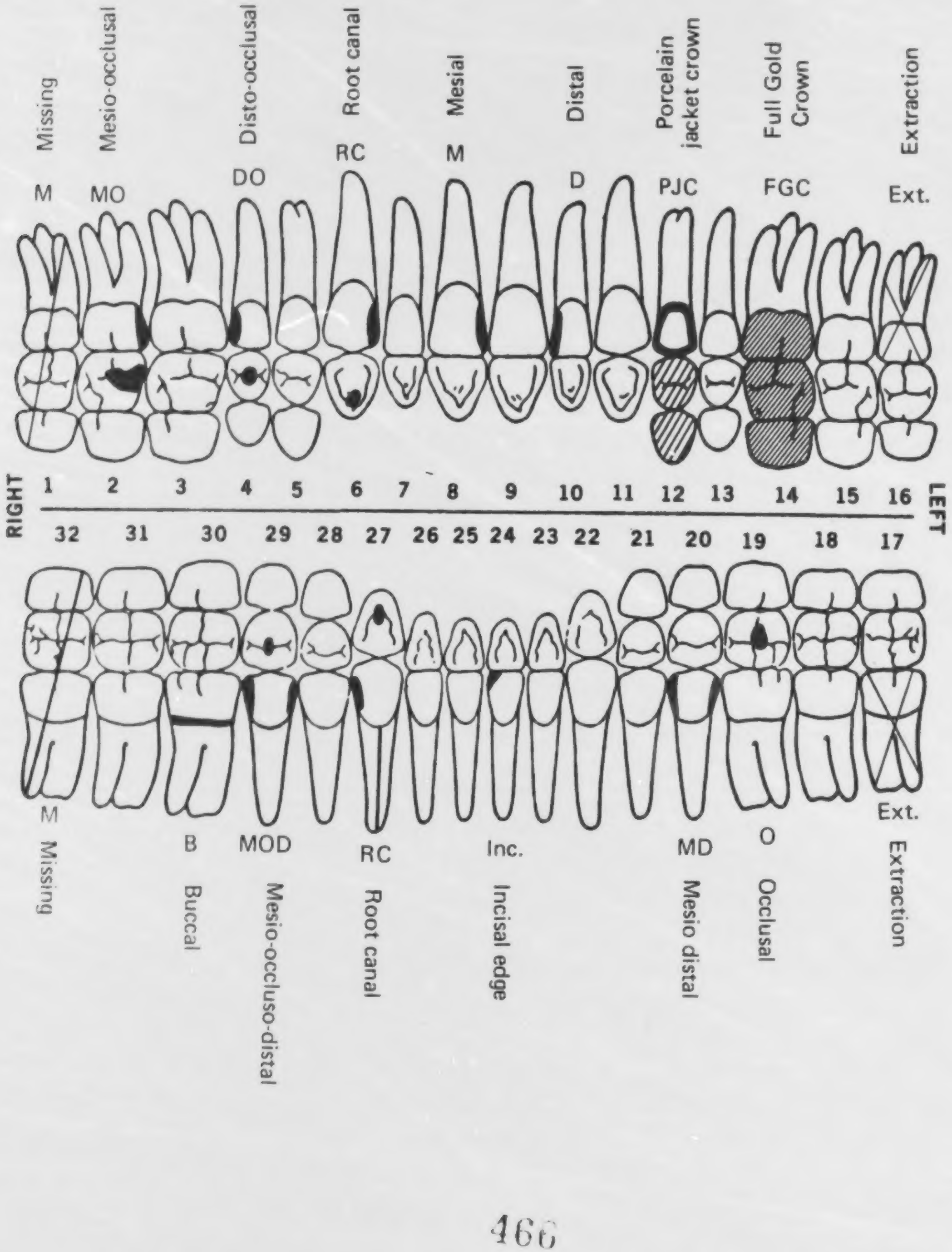
N. Maxillary full denture--MFD

O. Mandibular partial denture--Mand.PD

P. Mandibular full denture--Mand.FD

INFORMATION SHEET

XVIII. Methods of charting a clinical dental chart (Assignment Sheet #1)

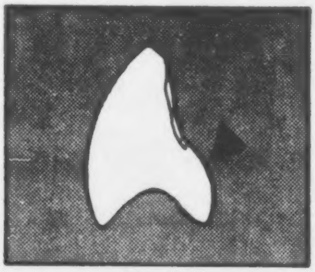

Missing
M
Mesio-occlusal
MO
Disto-occlusal
DO
Root canal
RC
Mesial
M
Distal
D
Porcelain jacket crown
PJC
Full Gold Crown
FGC
Extraction
Ext.
RIGHT
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
LEFT
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
M
Missing
B
Buccal
MOD
Mesio-occluso-distal
RC
Root canal
Inc.
Incisal edge
MD
Mesio distal
O
Occlusal
Ext.
Extraction

INFORMATION SHEET

XIX. Landmarks of individual tooth

A. Cingulum

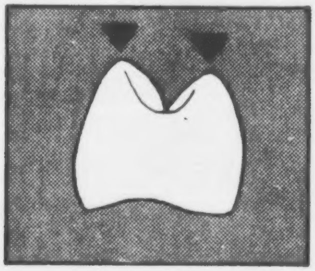
(NOTE: A cingulum is a bulge of enamel found on the cervical third of the lingual surface of an anterior tooth.)



Cingulum

B. Cusp

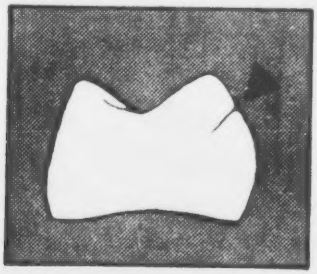
(NOTE: This is a pronounced elevation on the occlusal surface which has extra calcification; also considered to have an apex and four ridges.)



Cusp

C. Cusp of Carabelli

(NOTE: This is the "fifth" cusp located on the lingual surface of many maxillary first molars.)



Cusp of Carabelli

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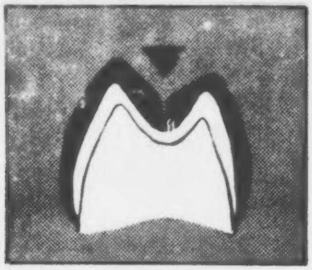
INFORMATION SHEET

D. Fissure

(NOTE: This is a fault along a developmental ridge, caused by imperfect joining.)

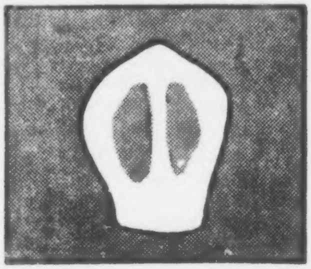


Fissure

XX. Fossa of a tooth

(NOTE: Fossa is a rounded or angular depression of varying size on the surface of a tooth.)

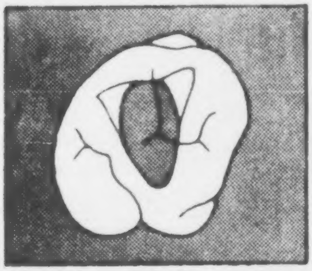
A. Lingual fossa



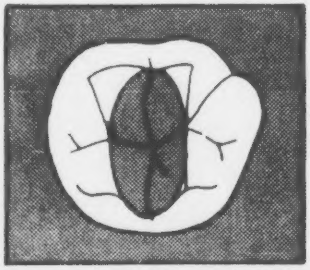
Lingual fossa

B. Central fossa

(NOTE: This is a broad, deep angular valley in the center of the occlusal surface of a molar.)



Central fossa-Maxillary molars



Central fossa-Mandibular molars

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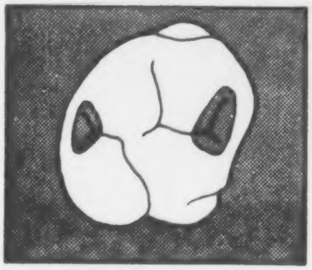
INFORMATION SHEET

C. Triangular fossa

(NOTE: This is a pyramid-shaped depression on the occlusal surfaces of posterior teeth, usually on the mesial or distal marginal ridge.)

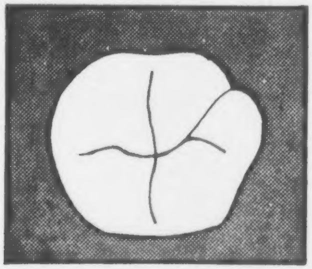


Triangular fossa

XXI. Grooves and other landmarks of a tooth

A. Developmental groove

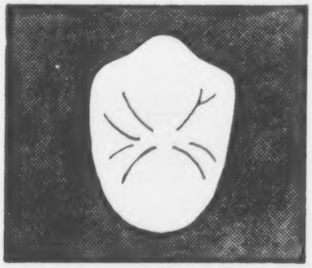
(NOTE: A developmental groove is formed by the union of two lobes during development of the crowns.)



Developmental groove

B. Supplemental groove

(NOTE: This is an indistinct simple line depression, which often gives the occlusal surface a wrinkled appearance.)



Supplemental groove

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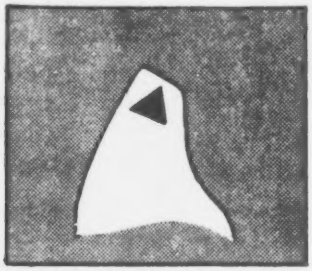
INFORMATION SHEET

C. Incisal edge

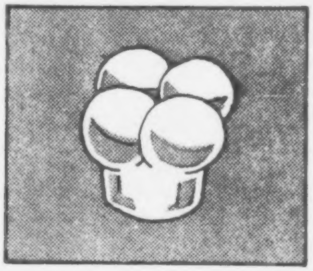
(NOTE: This edge is formed by the junction of the linguoincisal surfaces of an anterior tooth.)



Incisal edge

D. Lobe

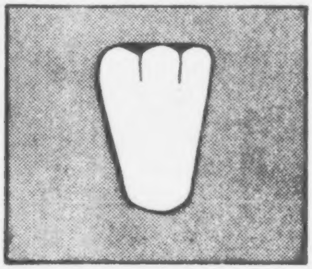
(NOTE: A lobe is a developmental segment part of the tooth usually seen only in deciduous teeth.)



Lobe

F. Mamelon

(NOTE: These usually occur on newly-erupted deciduous incisors.)



Mamelon

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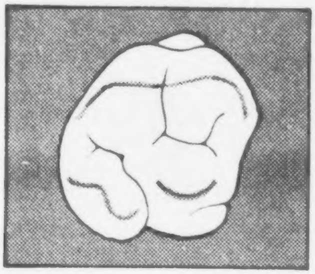
INFORMATION SHEET

XXII. Ridges of a tooth

A. Cusp ridge

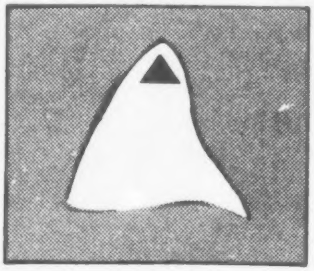
(NOTE: Cusp ridges form the buccal and lingual margins of the occlusal surface of the posterior teeth.)



Cusp ridge

B. Incisal ridge

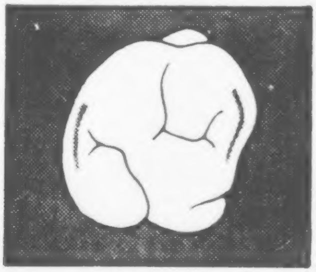
(NOTE: This is the incisal portion of a newly-erupted anterior tooth.)



Incisal ridge

C. Marginal ridge

(NOTE: This is elevated crest or rounded folds.)



Marginal ridge

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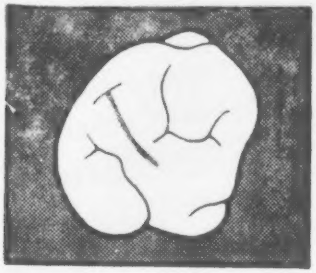
INFORMATION SHEET

D. Oblique ridge

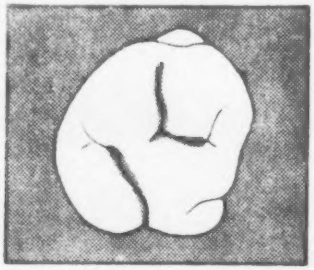
(NOTE: This is seen on maxillary molars as elevations or at an angle.)



Oblique ridge

E. Sulcus

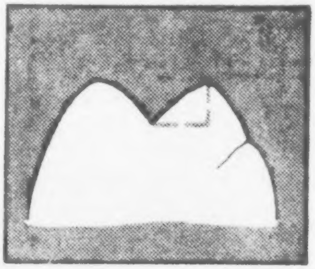
(NOTE: Sulcus is an elongated valley in the surface of a tooth formed by ridges which meet at an angle.)



Sulcus

F. Triangular ridge

(NOTE: These are prominent elevations, triangular in cross-sections.)



Triangular ridge

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INFORMATION SHEET

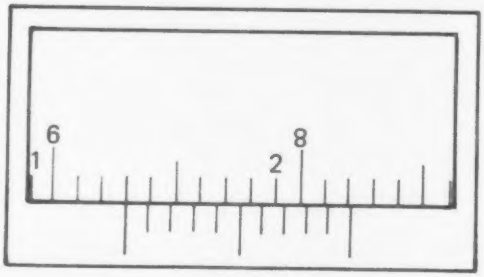
XXIII. Parts of a Boley gauge (Transparency 7)

- A. Curved beaks
- B. Base jaw
- C. Index line or zero guide
- D. Straight beaks
- E. Lock
- F. Movable jaw
- G. Fixed scale
- H. Notch
- I. Vernier
- J. Straight edge

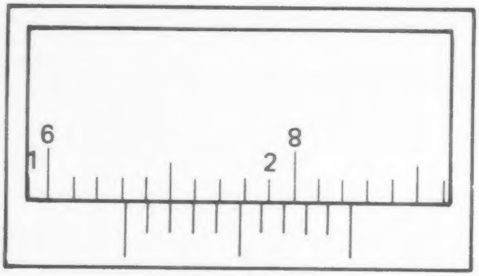
XXIV. Reading the Boley gauge

- A. Graduations on the fixed scale range from 0 to 10; each graduation is equal to 1 centimeter
- B. Graduations on the vernier also have ten equal parts but these ten are equal to 9 millimeters
- C. Numbers read on the fixed scale are written as units while those read on the vernier are written decimally
- D. Each unit equals one millimeter
- E. Each fraction is equal to one-tenth millimeter

Example:



1.3



1.32

INFORMATION SHEET

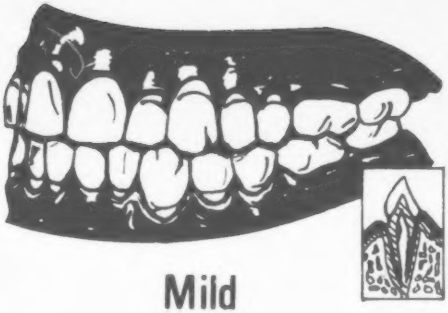
F. Write down first number to left of index line and nearest to "zero guide"

G. Place a decimal point to the right of number

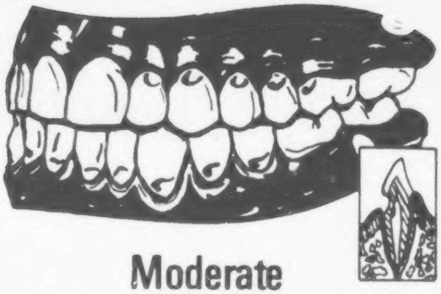
(NOTE: If index line is to right of the line on the fixed scale this indicates a fraction of a millimeter; if the index line is directly under any line of the fixed scale, this is the measurement in units.)

H. Count the graduations on the vernier scale to the right of index line until a line on the vernier exactly coincides with a line in the fixed scale, and place this figure to the right of the decimal point

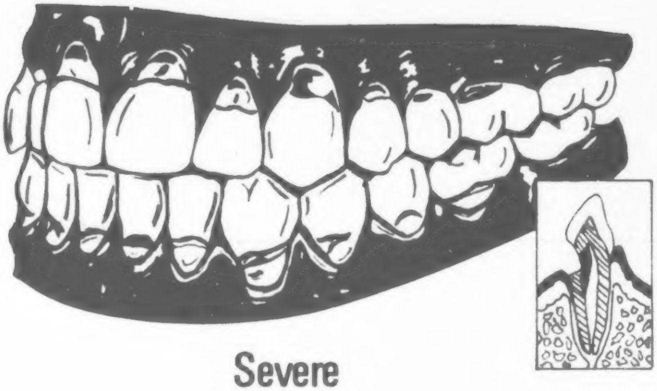
Dental Erosions



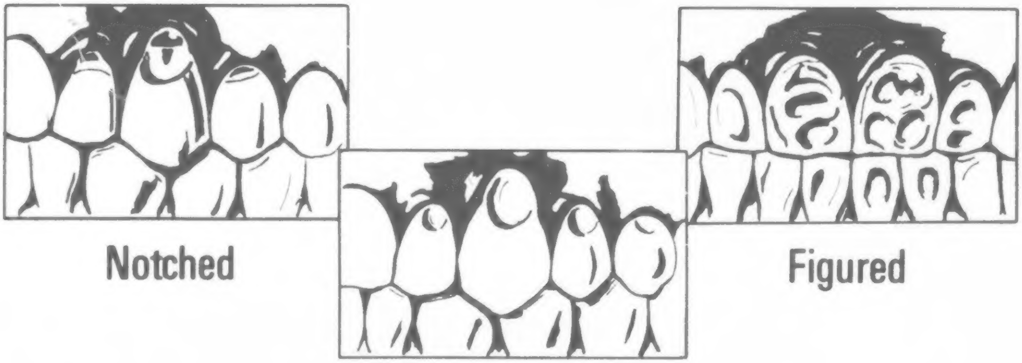
Mild



Moderate



Severe



Notched

Figured

Dished

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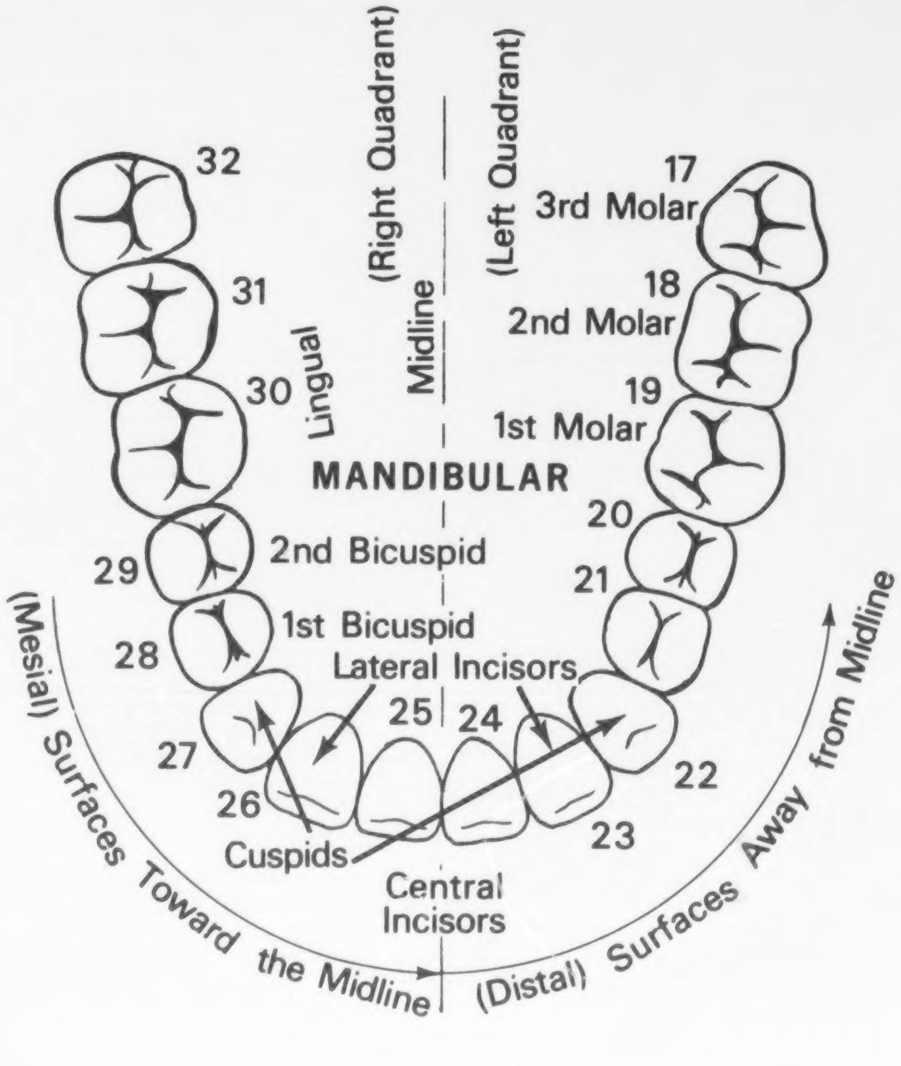
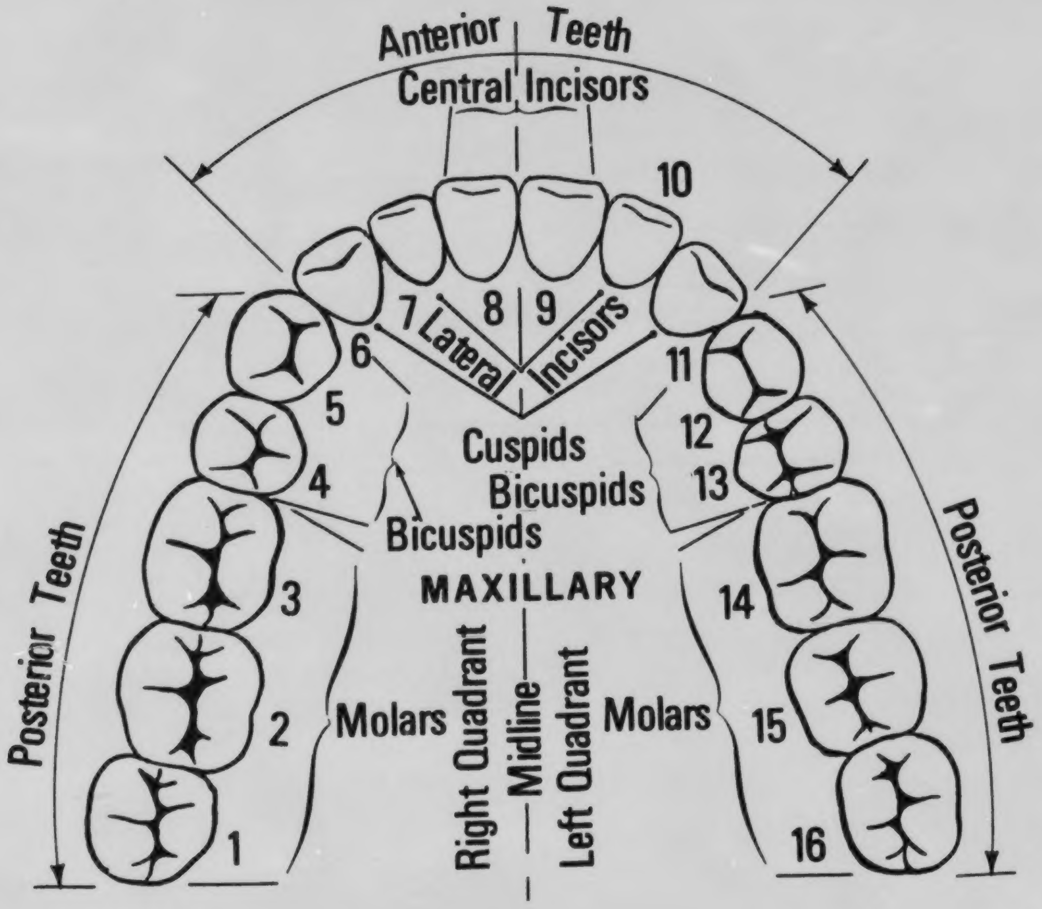
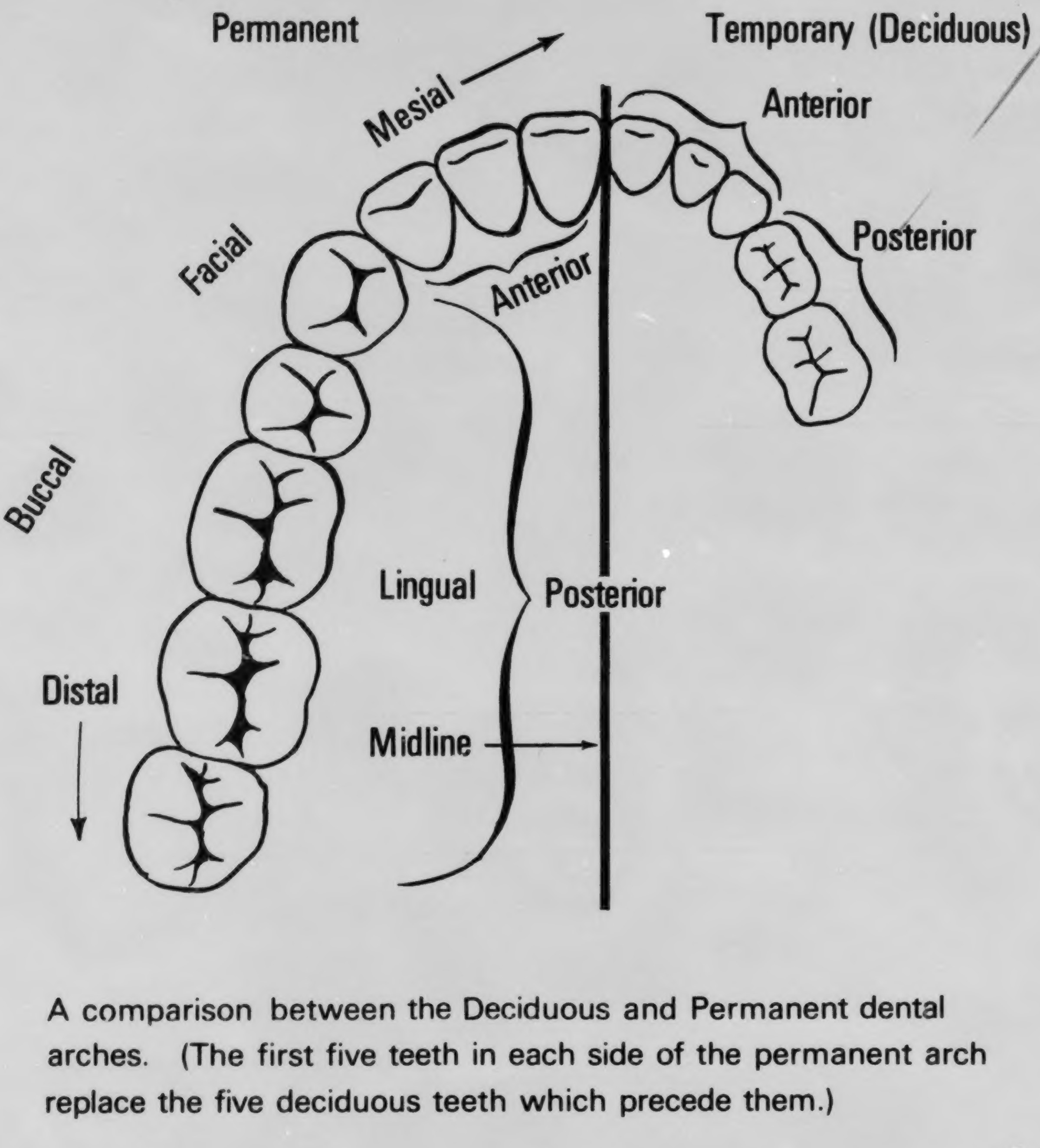
Mandibular Teeth


(Right Quadrant)
(Left Quadrant)
Midline
Lingual
MANDIBULAR
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
3rd Molar
2nd Molar
1st Molar
2nd Bicuspid
1st Bicuspid
Lateral Incisors
Cuspids
Central Incisors
(Mesial) Surfaces Toward the Midline
(Distal) Surfaces Away from Midline

Maxillary Teeth

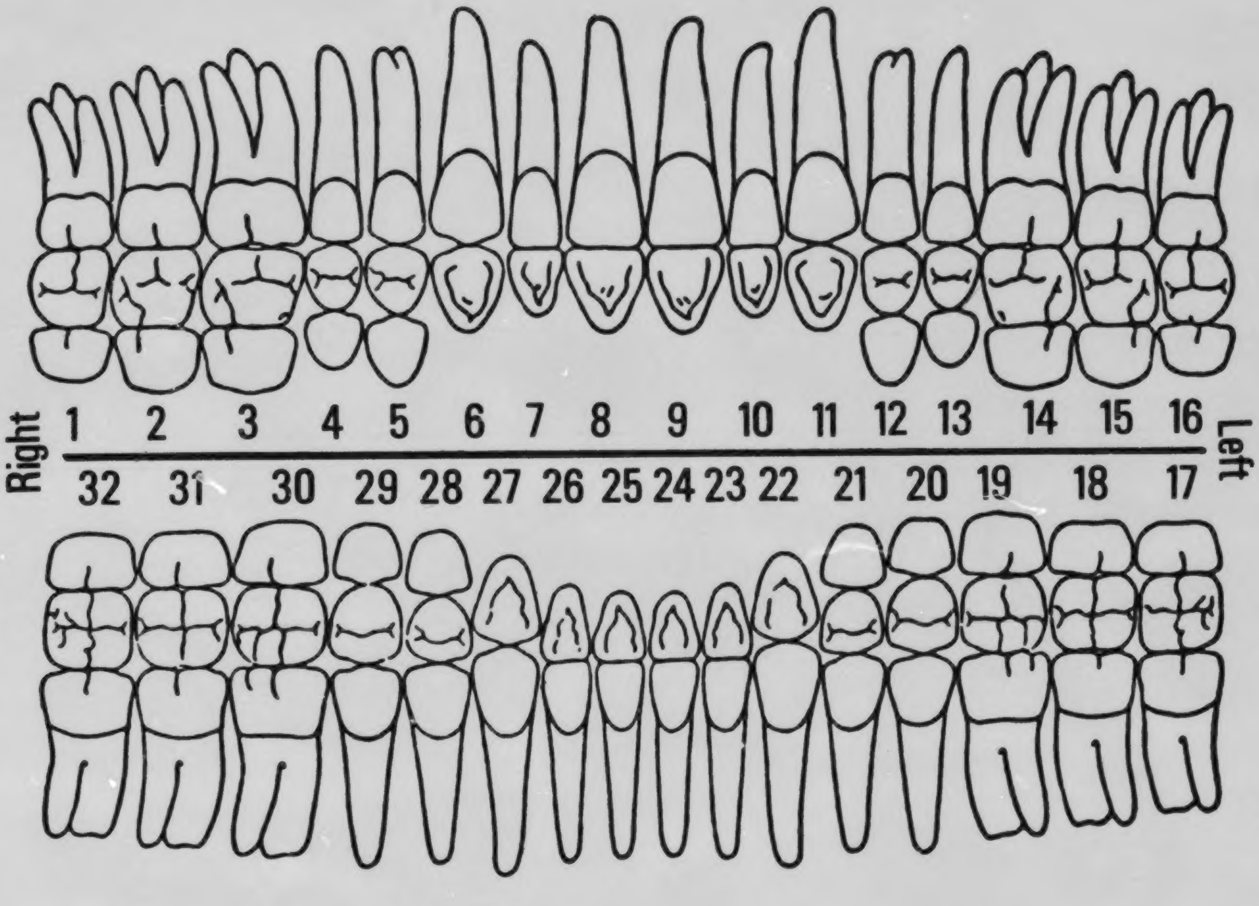

Anterior Teeth
Central Incisors
10
7
8
9
Lateral Incisors
6
11
5
12
Cuspids
Bicuspids
4
13
Bicuspids
MAXILLARY
3
14
Posterior Teeth
Posterior Teeth
Molars
Right Quadrant
Midline
Left Quadrant
Molars
2
15
1
16

Comparison Between Deciduous and Permanent Arches

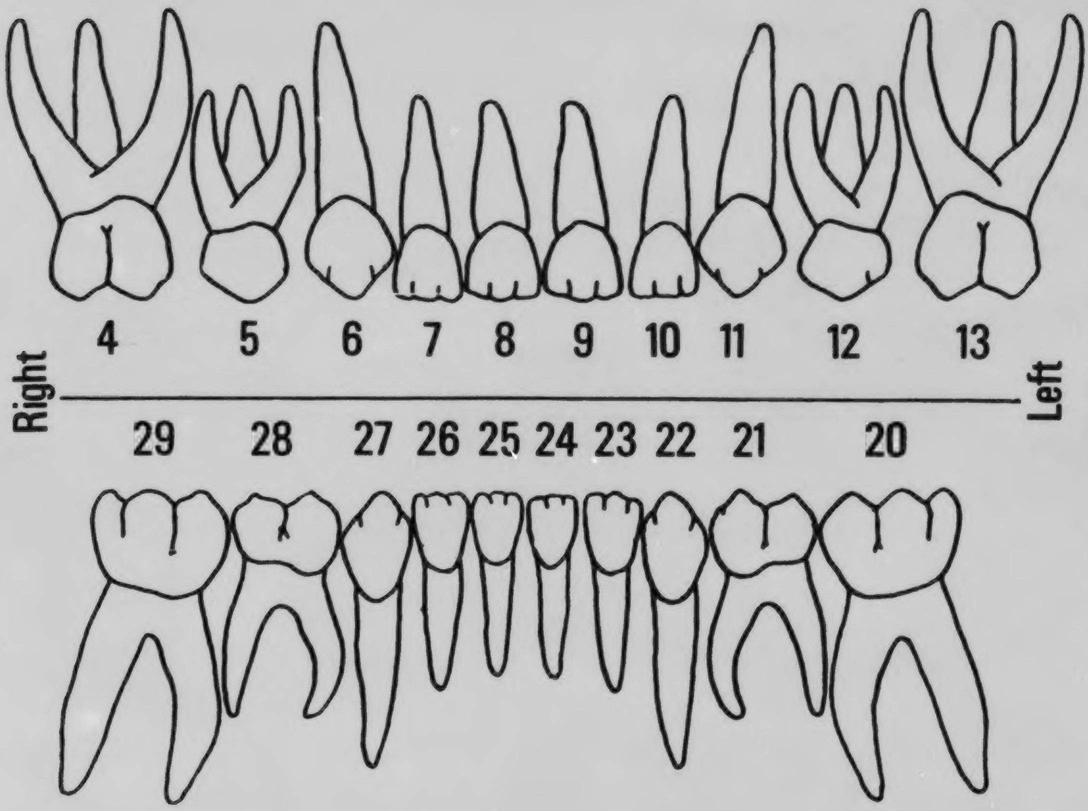

Permanent
Temporary (Deciduous)
Mesial
Anterior
Facial
Anterior
Posterior
Buccal
Lingual
Posterior
Distal
Midline

A comparison between the Deciduous and Permanent dental arches. (The first five teeth in each side of the permanent arch replace the five deciduous teeth which precede them.)

Permanent Teeth


Right
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
Left

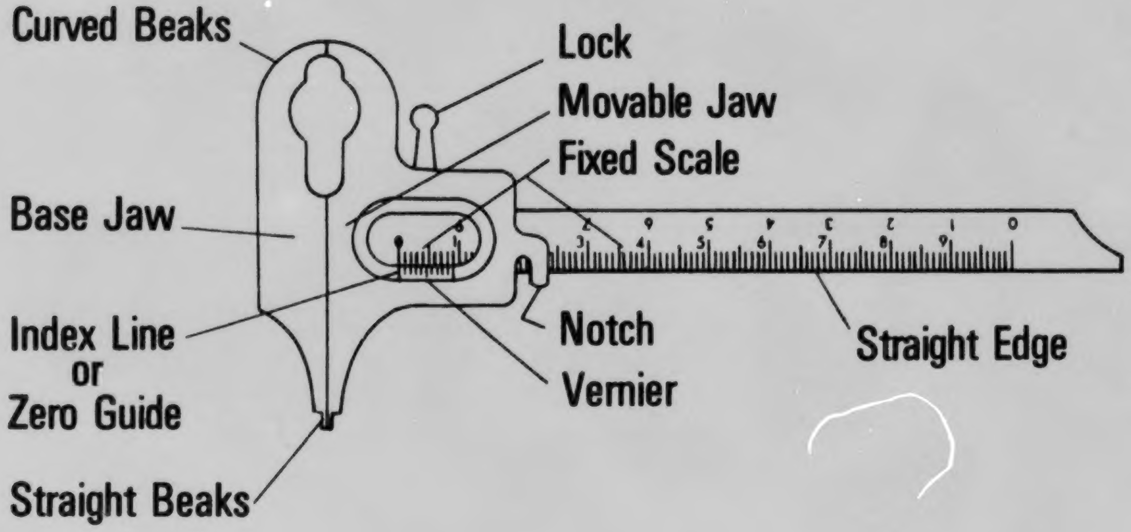
Deciduous Teeth


4
5
6
7
8
9
10
11
12
13
Right
Left
29
28
27
26
25
24
23
22
21
20

TM 6

480

Parts of a Boley Gauge


Curved Beaks
Lock
Movable Jaw
Fixed Scale
Base Jaw
Index Line or Zero Guide
Notch
Straight Edge
Vernier
Straight Beaks

HISTOMORPHOLOGY
UNIT I

ASSIGNMENT SHEET #1--PRACTICE CHARTING TEETH

NAME ______________________ SCORE ______________

It is most important for you to learn the charting system of your teeth, as it will be used during oral examinations, X-ray dictation, and tray setups. Using the notations and charts below and on the following pages, practice until you can chart quickly and correctly.

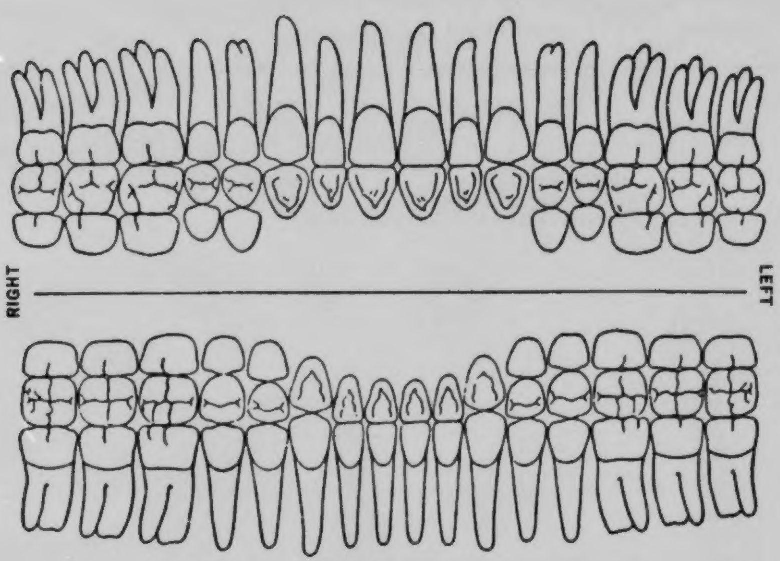
PERMANENT TEETH

A. Chart the teeth below using the chart on the next page.

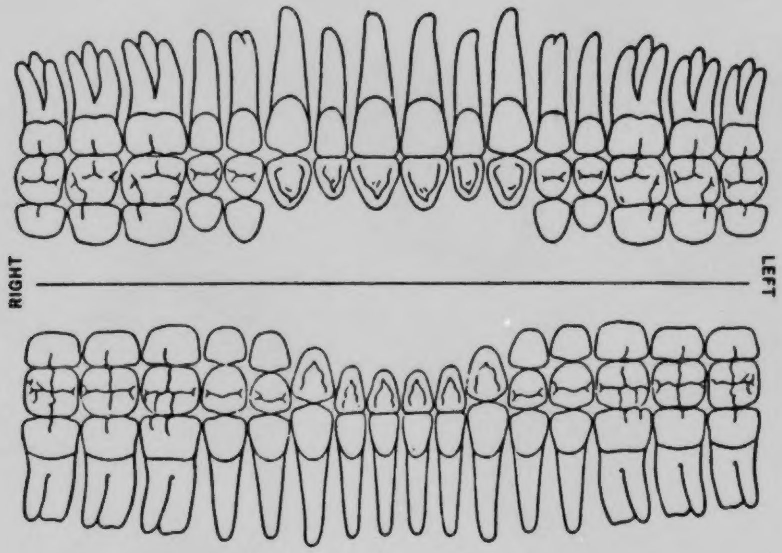
Classification of cavity and other notations	Tooth #
MOD	3
O	2
Extraction	16
DO	5
MI	24
OL	19
ML	31
DL	18
MB	18
DB	6
X	1
MO	12
MOD	16
D	15
RC	30

Classification of cavity cavity and other notations	Tooth #
D	7
M	13
MD	8
D	29
Extract	23
Missing	25
B	20
B	29
D	4

ASSIGNMENT SHEET #1



B. Use the chart below to mark cavities and other notations dictated to you by another student or your instructor.

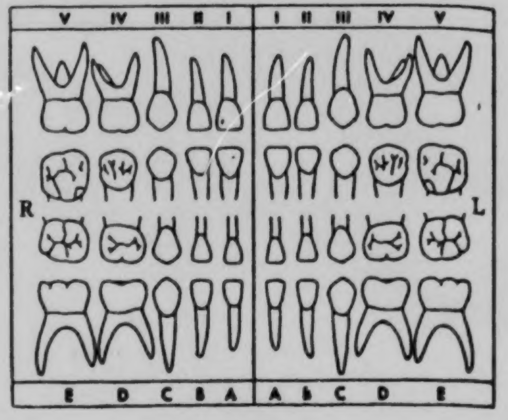


ASSIGNMENT SHEET #1

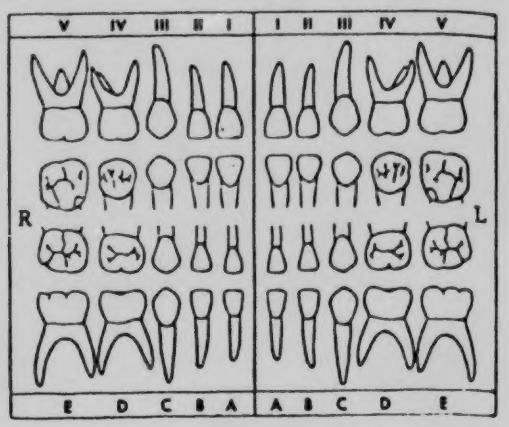
DECIDUOUS TEETH

A. Chart the following cavities on the chart given here.

Upper left central	D
Upper left lateral	M
Upper left 2nd molar	MOD
Lower left 2nd molar	MOD
Lower left lateral	M
Lower left central	D


V IV III II I
I II III IV V
R
L
E D C B A
A B C D E

B. Use the chart below to mark cavities and other notations dictated to you by your instructor or another student.

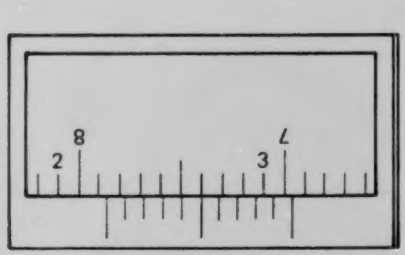

V IV III II I
I II III IV V
R
L
E D C B A
A B C D E

HISTOMORPHOLOGY
UNIT I

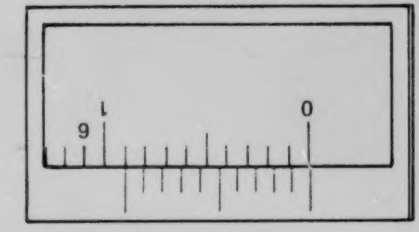
ASSIGNMENT SHEET #2--READ THE BOLEY GAUGE

Name______________________________ SCORE________________

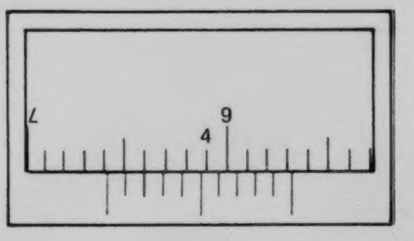
Read the following Boley gauge settings and record answers in the blanks provided.



1. __________________

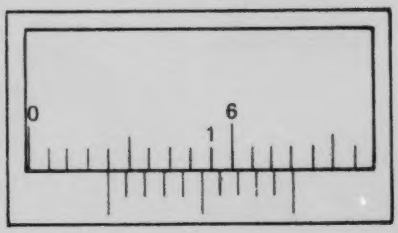


2. __________________

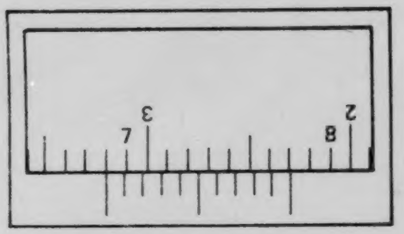


3. __________________

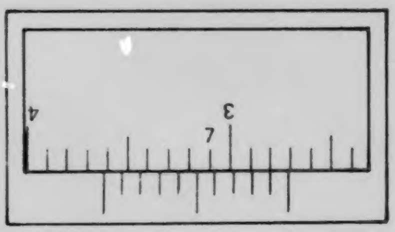
ASSIGNMENT SHEET #2



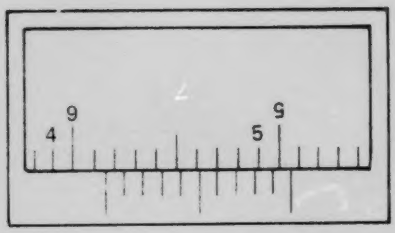
4. ______________________



5. ______________________

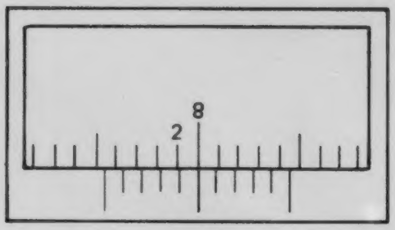


6. ______________________

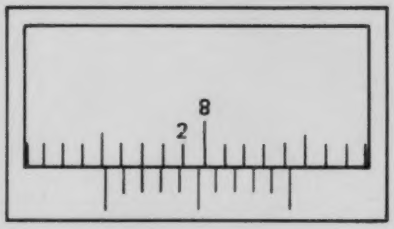


7. ______________________

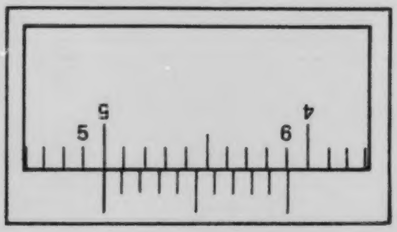
ASSIGNMENT SHEET #2



8. ____________________



9. ____________________



10. ____________________

HISTOMORPHOLOGY
UNIT I

ANSWERS TO ASSIGNMENT SHEET #2

1. 2.15 centimeters
2. 9.10 centimeters
3. 3.42 centimeters
4. .4 centimeters
5. 6.8 centimeters
6. 6.39 centimeters
7. 4.16 centimeters
8. 1.55 centimeters
9. 1.52 centimeters
10. 5.0 centimeters

HISTOMORPHOLOGY
UNIT I

JOB SHEET #1--MEASURE TEETH

I. Materials:

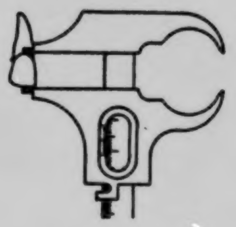
A. Boley gauge

B. Extracted anterior and posterior teeth

(NOTE: Record your measurements in the spaces provided.)

II. Procedure:

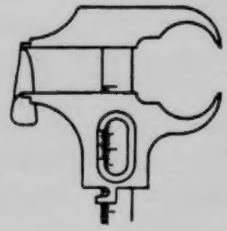
A. Measure length of crown



LENGTH OF CROWN

Length = ______________

B. Measure length of root



LENGTH OF ROOT

Length = ______________

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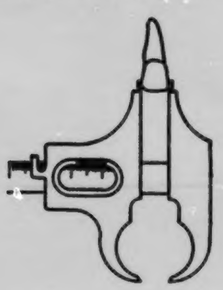
JOB SHEET #1

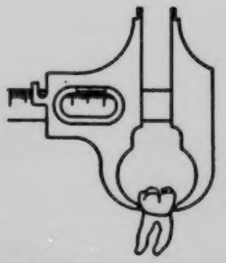
C. Measure mesio-distal diameter of crown



MESIO-DISTAL DIAMETER OF CROWN.

Diameter = ______________

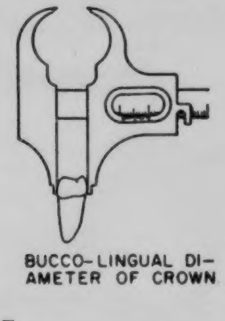
D. Measure mesio-distal diameter of crown at cervix



MESIO-DISTAL DIAMETER OF CROWN AT CERVIX.

Diameter = ______________

E. Measure bucco-lingual diameter of crown



BUCCO-LINGUAL DIAMETER OF CROWN

Diameter = ______________

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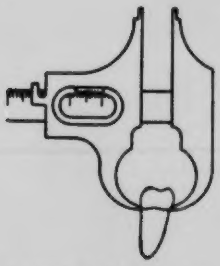
JOB SHEET #1

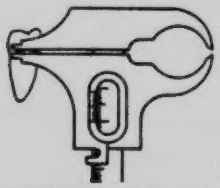
F. Measure bucco-lingual diameter of crown at cervix



BUCCO-LINGUAL DIAMETER OF CROWN AT CERVIX.

Diameter = ________________

G. Measure curvature of cemento-enamel junction on mesial



CURVATURE OF CEMENTO-ENAMEL-JUNCTION ON MESIAL.

Curvature = ________________

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HISTOMORPHOLOGY
UNIT I

JOB SHEET #2--LAYOUT AND CARVE A TOOTH

I. Equipment:

A. #2 pencil

B. Graph paper

C. Ruler with millimeter graduations

D. 12 inch plastic triangle

E. Measurements from Job Sheet #1

F. Plaster carving knife

G. #3 amalgam carver or roach carver

H. #35 wax spatula

I. Set of plastic teeth

(NOTE: A set of plaster of paris teeth can be used for observation.)

J. Wax carving blocks (1" by 1" by 1 3/4")

K. Fine silk string or dental floss

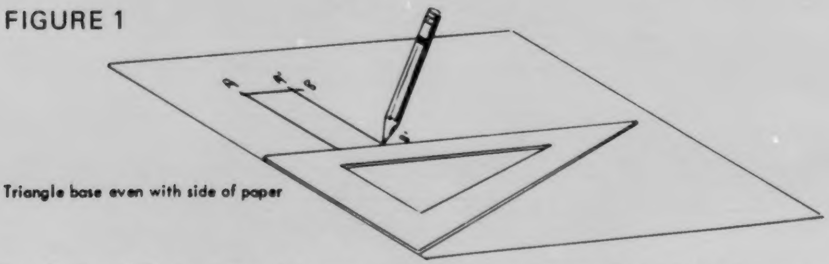
II. Procedure for layout

(NOTE: Start your drawing about 1 1/2 inches in from edge of paper. Write measurements to side of layout; see Figure 3.)

A. Draw line A and A' designating width of tooth (Figure 1)

(NOTE: Keep lines parallel by aligning base of triangle with edge of paper.)

FIGURE 1



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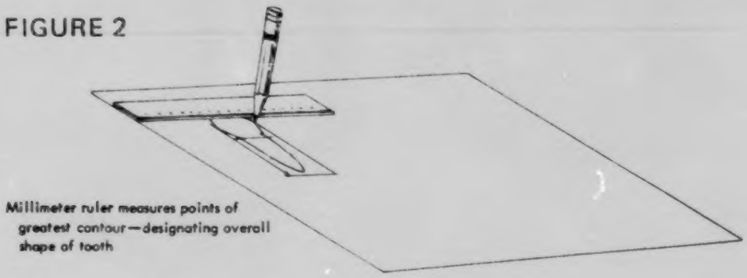
JOB SHEET #2

B. Draw line B and B' designating length of tooth; connect lines to form rectangle

C. Mark length of crown on both sides of the rectangle; connect points to separate crown from root (Figure 2)

FIGURE 2



Millimeter ruler measures points of greatest contour—designating overall shape of tooth

D. Mark point of the greatest curvature of the labial surface from the cervical line (Figure 2)

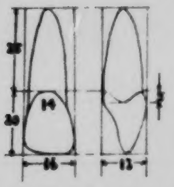
E. Mark point of greatest curvature of lingual surface on the opposite line

F. Follow the same procedure for the rest of the crown and root

(NOTE: The layout should now include points placed in proper position for outlining the curvature of the tooth.)

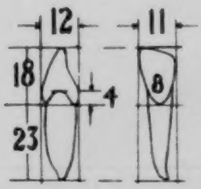
G. Connect dots to give outline of tooth (Figure 3)

FIGURE 3



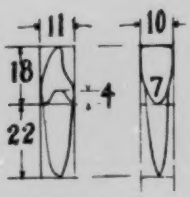
Suggested dimensions for carving

Maxillary central incisor



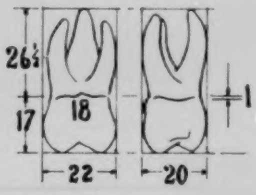
Suggested dimensions for carving

Mandibular incisor



Suggested dimensions for carving

Mandibular central



Molar

Suggested dimensions for carving

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JOB SHEET #2

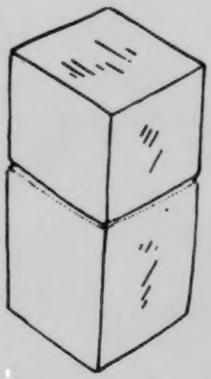
III. Procedure for carving

A. Scratch measurements on the surface of wax block

B. Scribe a line across block approximately 2mm longer than the measurement of the crown from the incisal or occlusal surface to the cervical line (Figure 4)

(NOTE: Make this mark with a sharp instrument on all sides of the block.)

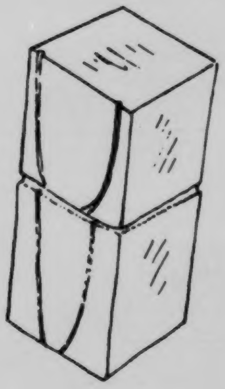
FIGURE 4



Block of wax marked at cervix of tooth

C. Carve a shallow outline of the labial or buccal surface on one face only of the block (Figure 5)

FIGURE 5



Labial surface outline scratched on one face of block

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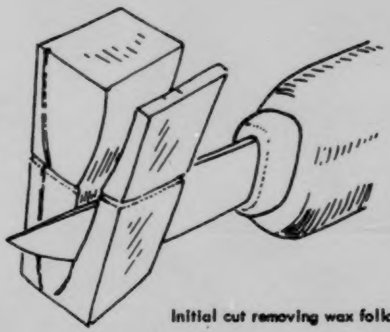
JOB SHEET #2

D. Scratch a shallow line for the root of the tooth to correspond with the buccal or labial surface

E. Begin cutting away extra wax following outline by shaving small portions to prevent cracking (Figure 6)

(NOTE: Angle the blade of the knife to the right of each area to be carved, allowing blade to drag rather than cut. If deep notches occur, change the angle of motion slightly.)

FIGURE 6



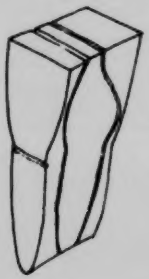
Initial cut removing wax following outline

F. Measure often to be sure the removal of stock is not more than allowed

G. Scratch mesial surface outline (Figure 7)

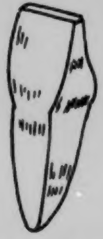
(NOTE: After cutting away excessive wax use the amalgam carver, keeping measurement approximately 1/2 mm larger than exact measurements.)

FIGURE 7



Mesial surface outline scratched on one face of block

FIGURE 8



Four sides of block removed to outline

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H. Cut along outline (Figure 8)

(NOTE: Use the flat side of the carver on flats and incline planes.)

JOB SHEET #2

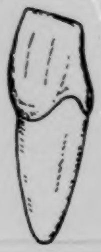
I. Use the amalgam carver to cut or carve occlusal aspects

J. Carve all pits and fissures

K. Use silk string for finishing surfaces (Figure 9)

(NOTE: The final polishing has a tendency to round edges to some extent.)

FIGURE 9



Finished carving

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HISTOMORPHOLOGY
UNIT I

TEST

NAME________________________________ SCORE________________

1. Match terms associated with tooth morphology to the correct definitions. Place the correct numbers in the blanks provided.

______a. Pulp which projects toward cusp tip and incisal edges

______b. Gingiva which is higher than epithelial attachment, but not bound to underlying tissue

______c. Loss of deciduous dentition

______d. Bone separating roots of tooth

______e. Permanent teeth which replace deciduous (primary) teeth

______f. Study of the first weeks of prenatal development

______g. Cavity (hole) within alveolar process in which roots of tooth are held in periodontal ligament

______h. Gingival tissue located between two teeth

______i. Mucous membrane which covers alveolar processes and surrounds teeth

______j. Science which deals with structure, composition, form, and functions of tissues and teeth

______k. Tool used for measuring teeth

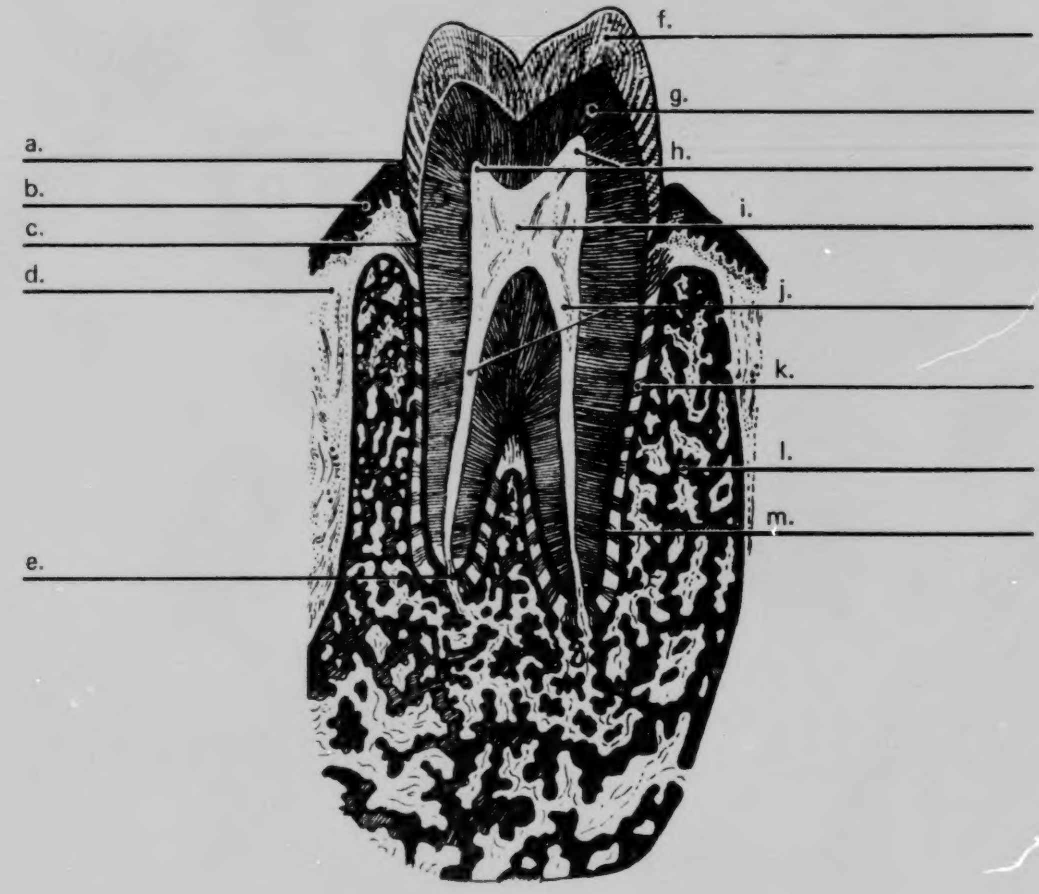
______l. Space between tooth and free margin of gingiva

______m. Round or angular depression of varying size on the surface of a tooth

______n. Entire array of teeth in jaw; natural teeth in position in the alveoli

1. Embryology
2. Exfoliation (shedding)
3. Alveolar socket (alveolus)
4. Interdermal septum
5. Gingiva
6. Free gingiva
7. Gingival sulcus
8. Papilla (interdental papilla)
9. Boley gauge
10. Fossa
11. Histomorphology
12. Succedaneous teeth
13. Pulp horn
14. Dentition

2. Identify the parts of a tooth and its supporting structures shown in the drawing below. Write the correct names in the blanks provided.



Root canals

Dentin

Apical foramen

Cervical line

Cementum

Pulp chamber

Alveolar bone

Submucosa

Gingival crest

Enamel

Periodontal ligament

Gingiva

Pulpal horns

3. Match the functions of main parts of a tooth to the correct descriptions. Place the correct numbers in the blanks provided.

______a. Aides in forming dentin, supplies nutrition to tooth; receives and transmits pain stimuli

______b. Supports teeth in their functional positions in jaw

______c. Serves as a thermal conductor and transmits pain stimuli

______d. Serves as anchoring ligament and as separating tissue

______e. Serves as a protection for vital parts of tooth

______f. Anchors teeth to bony sockets by attachments

______g. Entry for nerves and blood vessels

1. Enamel
2. Dentin
3. Pulp
4. Cementum
5. Periodontal ligament
6. Alveolar process
7. Apex

4. Match terms associated with composition and formation of the teeth to the correct definitions. Place the correct numbers in the blanks provided.

______a. Tip of the root

______b. Division into two roots

______c. Curved or rounded

______d. Covers roots of teeth

______e. Found mainly in coronal (crown) portion

______f. Covers enamel and is exposed in oral cavity

______g. Makes up bulk of tooth

______h. Surface curving inward

______i. Calcified substance that covers entire crown of tooth

______j. Portion of root covered by cementum

______k. Space in central portion of crown and roots filled with pulp tissue

1. Anatomic crown
2. Anatomic root
3. Convex
4. Apex
5. Pulp cavity
6. Pulp chamber
7. Cementum
8. Concave
9. Enamel
10. Bifurcation
11. Dentin

______l. Lines junction of enamel and cementum of root

______m. Narrow passage or channel

______n. Division into three roots

______o. Opening at end of roots for blood vessels and nerves to pass through

12. Pulp canal (root canal)
13. Trifurcation
14. Cementoenamel junction (cervical line)
15. Apical foramen

5. Match types of tooth abnormalities to their definitions. Write the correct numbers in the blanks provided.

______a. Wearing away of dental enamel by friction of a foreign body

______b. Superficial loss of enamel by chemical process that does not involve dental caries

______c. Appears as a single tooth in the mouth of a child, due to the mother taking tetracycline during pregnancy

______d. Teeth beyond normal number; extra teeth

______e. Teeth not within normal dental alignment

______f. Embryonic imperfections in closure of palate or lip

______g. Joining together of dentin and/or enamel of two separate teeth

______h. Condition of being wedged in firmly

1. Black tooth
2. Fusion
3. Erosion
4. Cleft palate and cleft lip
5. Abrasion
6. Supernumerary teeth
7. Impaction
8. Malpositioned teeth

6. Complete the chart of approximate ages of tooth eruptions below. Write the correct information in the blanks provided.

Eruption of Deciduous Teeth

Mandibular central incisors .... __________
Maxillary central incisors............................ __________
Mandibular lateral incisors............................ __________
Maxillary lateral incisors .... __________
First molars.................................... __________
Cuspids .... __________
Second molars................................... __________

Eruption of Permanent Teeth

First molars.................................... __________
Central incisors .... __________
Lateral incisors .... __________
Cuspids .... __________
First bicuspids.................................. __________
Second bicuspids................................ __________
Second molars................................... __________
Third molars .... __________

7. List teeth in deciduous dentition.

a. ____

b. ____

c. ____

d. ____

e. ____

8. Select from the list below functions of deciduous teeth. Mark each correct answer with an "X."

_____a. Aesthetics (appearance)

_____b. Maintain space

_____c. Protect gums

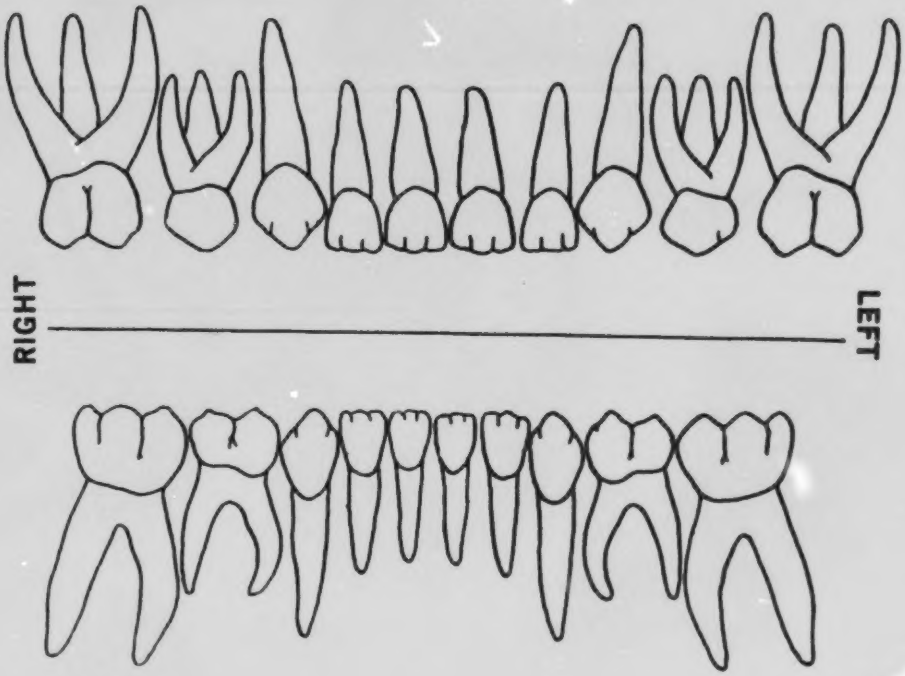
_____d. Speech development

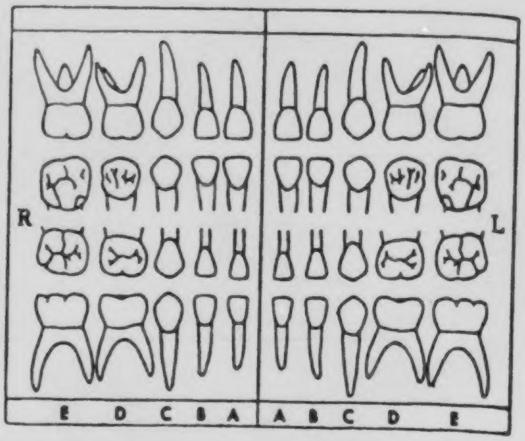
_____e. Alignment

_____f. Shallow anatomy

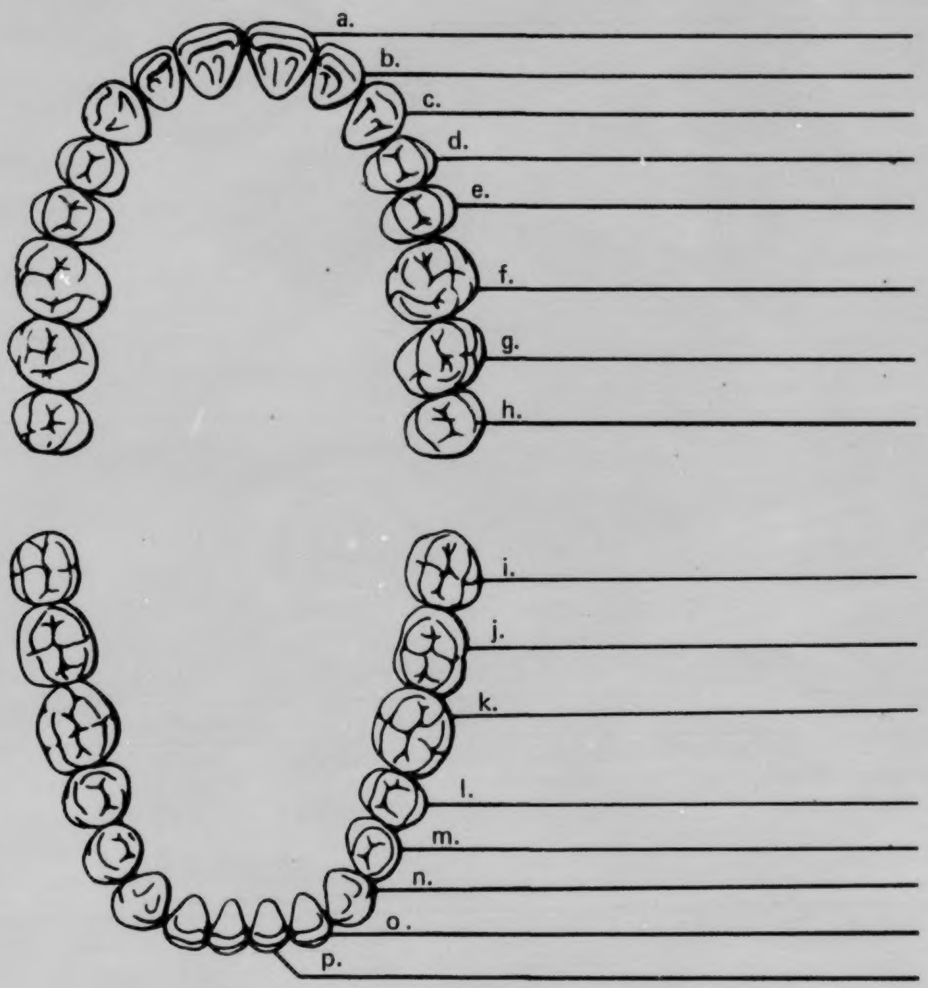
_____g. Mastication (chewing)

9. Label the drawings of the deciduous teeth shown below with the correct method of numbering.



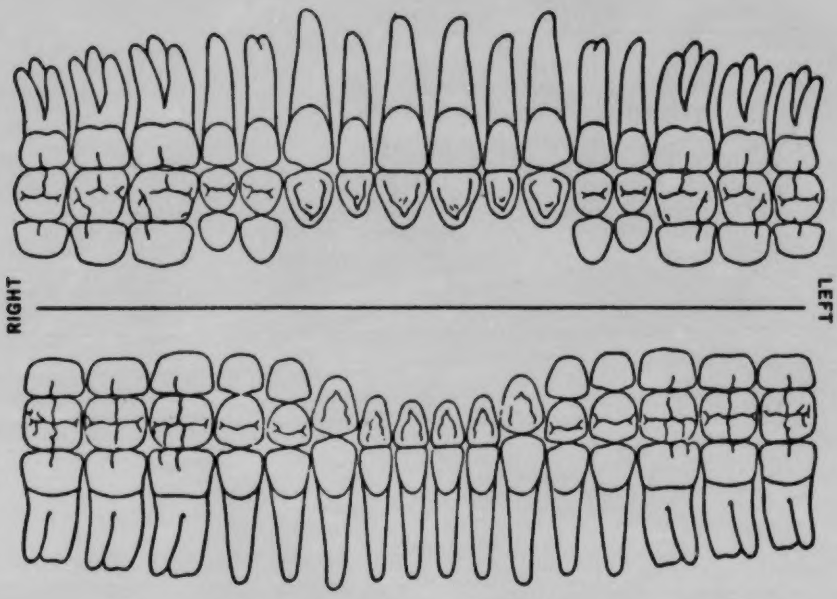

R
L
E D C B A A B C D E

10. Identify teeth of permanent dentition by writing the correct names in the blanks provided.

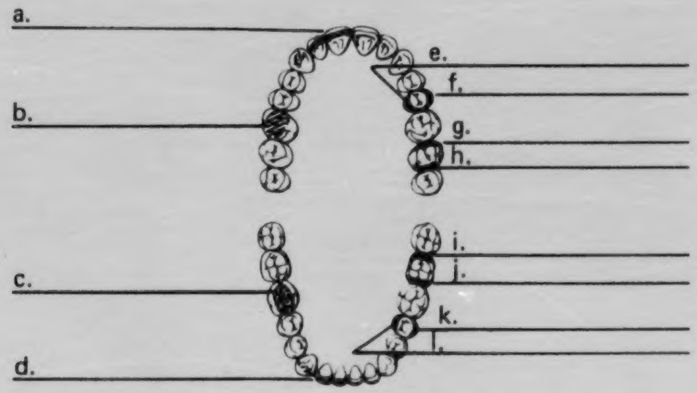


First molar
Cuspid
Central incisor
First bicuspid
Third molar
Lateral incisor
Second bicuspid
Second molar

11. Label the drawing of permanent teeth below using the correct method of numbering.



12. Identify the surfaces of the teeth shown in the drawing below. Write the correct names in the blanks provided.



Lingual
Occlusal
Incisal

Facial
Buccal
Mesial
Distal

13. Match terms associated with surfaces of teeth to their correct descriptions. Place the correct numbers in the blanks provided.

_____a. Biting edge of a tooth

_____b. Space between proximal surfaces

_____c. Curved surfaces of a tooth

_____d. Toward the lips

_____e. Relationship between chewing surface of maxillary and mandibular teeth

_____f. Toward the midline or anterior part of a tooth

_____g. Toward the front of a tooth

_____h. Surfaces that actually touch each other

_____i. Toward the cheeks

_____j. Surfaces that are close to the tongue or tongue side of tooth

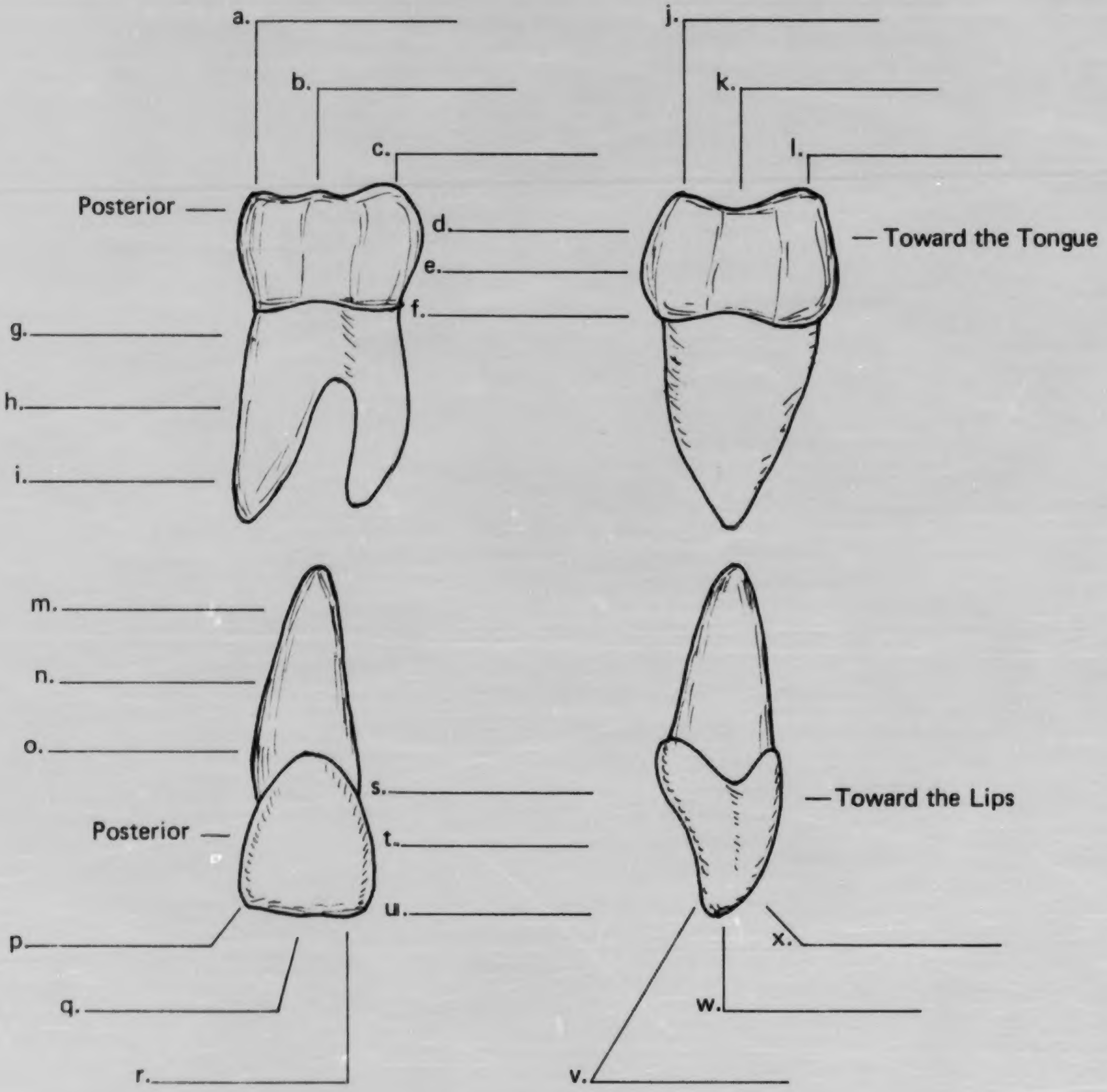
_____k. Away from midline; posterior part of a tooth

_____l. Situated behind; to the back of a tooth

_____m. Tooth surfaces that are next to one another

1. Occlusal
2. Lingual
3. Facial
4. Buccal
5. Mesial
6. Distal
7. Incisal
8. Posterior
9. Anterior
10. Proximal
11. Interproximal
12. Contact area
13. Contours

14. Identify the proximal surfaces and contact areas of the teeth shown in the drawings below. Write the correct information in the blanks provided.


a.
b.
c.
j.
k.
l.
Posterior
d.
e.
f.
— Toward the Tongue
g.
h.
i.
m.
n.
o.
s.
— Toward the Lips
Posterior
t.
u.
x.
p.
q.
w.
r.
v.

Lingual
Apical
Buccal
Cervical
Incisal

Distal
Middle
Labial
Occlusal
Mesial

15. Write abbreviations for each of the single surfaces of teeth listed below.

    a. Lingual--____________________

    b. Occlusal--____________________

    c. Incisal--____________________

    d. Mesial--____________________

    e. Buccal--____________________

    f. Distal--____________________

16. Write the correct abbreviations for each of the group surfaces of teeth listed below.

    a. Disto-lingual--____________________

    b. Mesio-incisal--____________________

    c. Disto-buccal--____________________

    d. Mesio-lingual--____________________

    e. Disto-occlusal--____________________

    f. Mesio-buccal--____________________

    g. Mesio-occlusal--____________________

    h. Occluso-lingual--____________________

    i. Mesio-occluso-distal--____________________

17. Match the entry codes on a clinical dental chart to their correct meanings. Place the correct numbers in the blanks provided. Terms continue on the next page.

______a. X or Ext.	1. Extraction
______b. Cr.	2. Maxillary full denture
______c. MFD	3. Amalgam
______d. In	4. Silicate
______e. Sili	5. Resin
______f. R	6. Inlay
______g. Amal	7. Crown

_____h. JPC

_____i. M or /

_____j. Mand.PD

_____k. Mand.FD

_____l. Fo

_____m. G

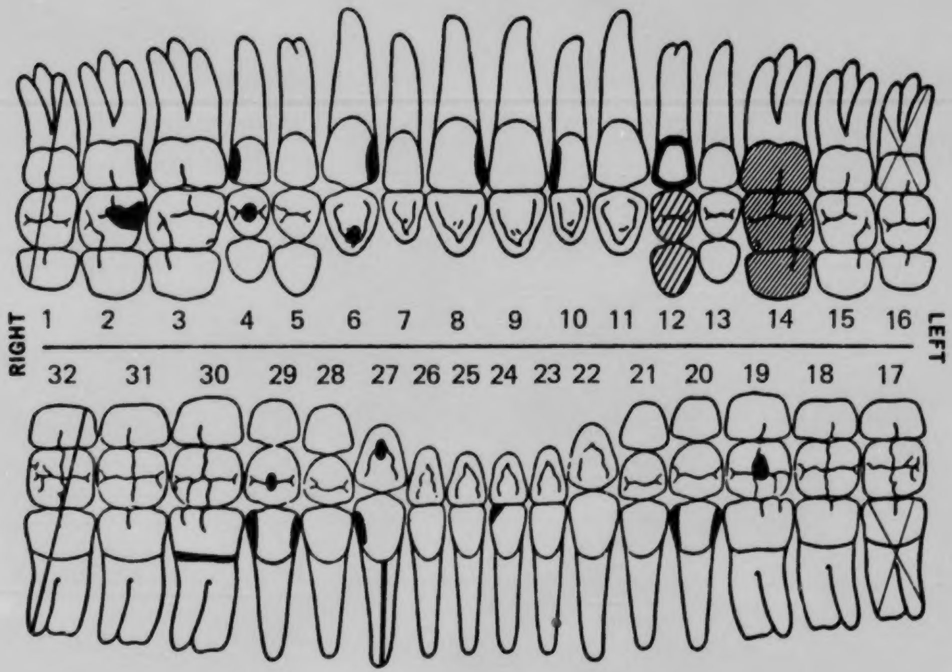
_____n. PI

_____o. Br.

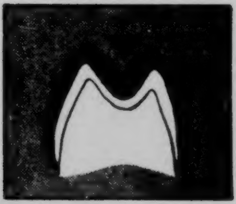
_____p. MPD

8. Porcelain inlay
9. Gold
10. Missing
11. Bridge
12. Porcelain jacket crown
13. Maxillary partial denture
14. Foil
15. Mandibular partial denture
16. Mandibular full denture

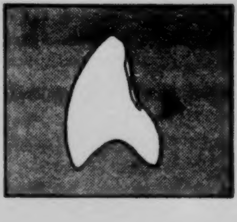
18. Chart the clinical dental chart below using correct methods of marking. Mark teeth according to the abbreviations given.


RIGHT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
LEFT
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17

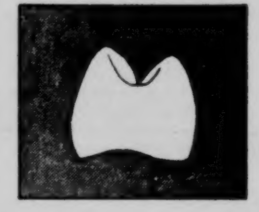
19. Identify landmarks of an individual tooth. Write the correct names in the blanks provided.



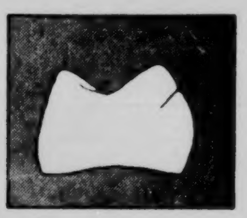
a. ______________________________



b. ______________________________



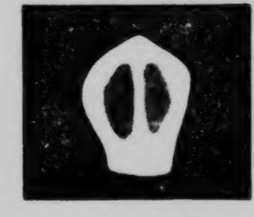
c. ______________________________



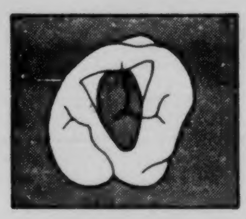
d. ______________________________

Fissure Cusp Cingulum **Cusp of Carabelli**

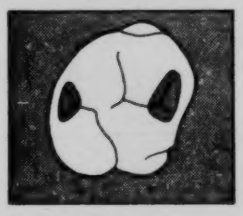
20. Identify the fossa area of a tooth shown in the drawings below. Write the correct names in the blanks provided.



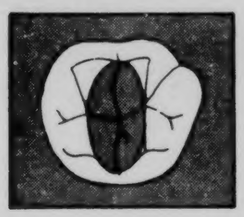
a. ______________________________



b. ______________________________



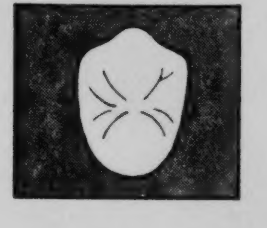
c. ______________________________



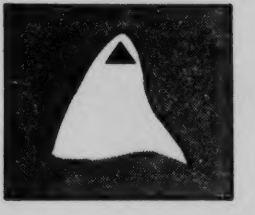
d. ______________________________

Lingual fossa	Central fossa (Maxillary molars)
Central fossa (Mandibular molars)	Triangular fossa

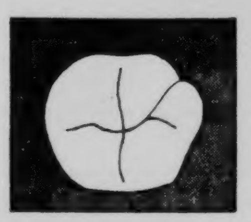
21. Identify each of the gooves and other landmarks of a tooth shown in the drawings below. Write the correct names in the blanks provided.



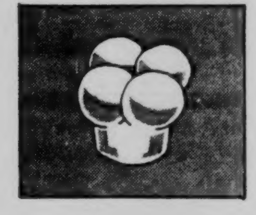
a. ______________________________



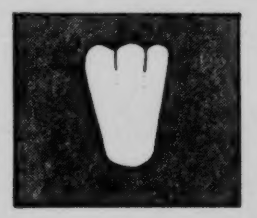
b. ______________________________



c. ______________________________



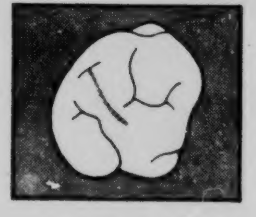
d. ______________________________



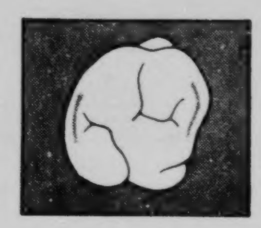
e. ______________________________

Developmental groove
Lobe
Supplemental groove
Mamelon
Incisal edge

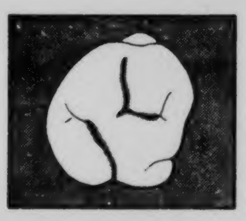
22. Identify each of the ridges of a tooth shown in the drawings below. Write the correct name in the blanks provided.



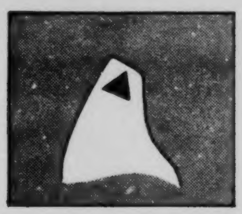
a. ______________________________



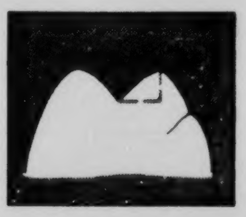
b. ______________________________



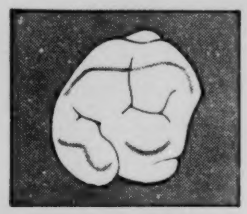
c. ______________________________



d. ______________________________



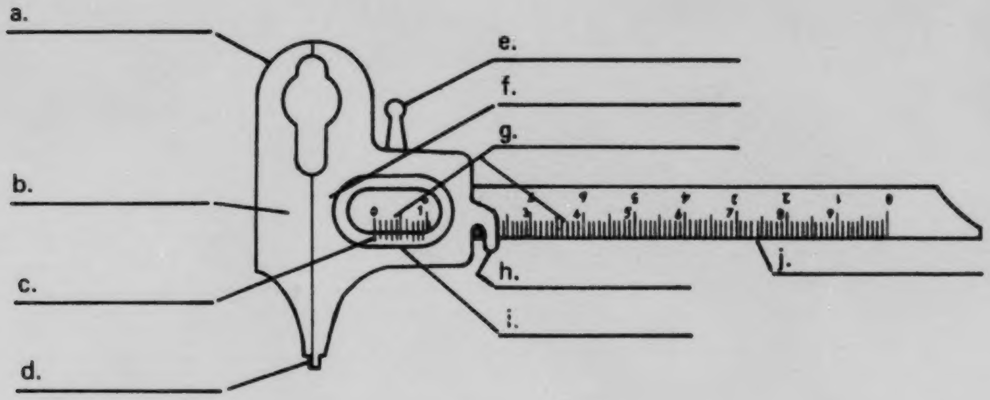
e. ______________________________



f. ______________________________

Cusp ridge
Triangular ridge
Incisal ridge
Oblique ridge
Marginal ridge
Sulcus

23. Identify parts of a Boley gauge shown below. Write the correct names in the blanks provided.

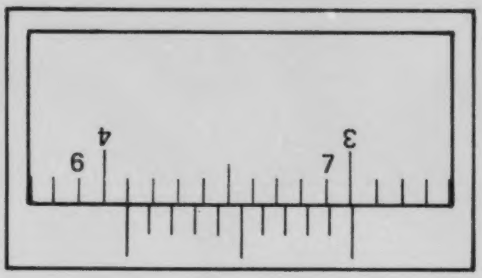


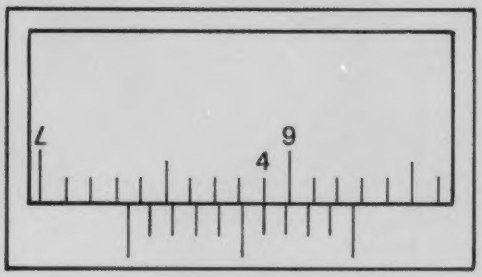
Straight beaks
Lock
Movable jaw
Curved beaks

Fixed scale
Straight edge
Vernier

Index line or zero guide
Notch
Base jaw

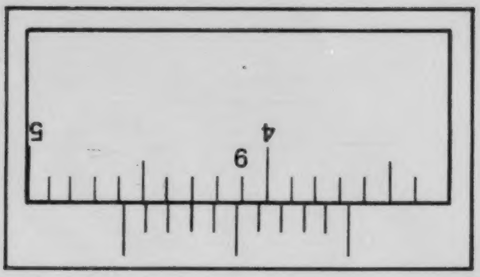
24. Read the measurements shown on the Boley gauges below. Write the correct answer in the blanks provided.

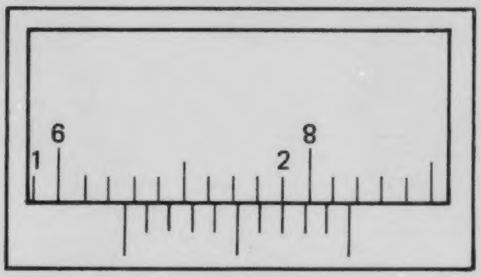




a. ______________________

b. ______________________





c. ______________________

d. ______________________

25. Practice charting teeth.

26. Read the Boley gauge.

27. Demonstrate the ability to:

    a. Measure teeth.

    b. Layout and carve a tooth.

(NOTE: If activities 25-27 have not been finished before the test, ask your instructor when they should be completed.)

HISTOMORPHOLOGY
UNIT I

ANSWERS TO TEST

1. a. 13
   b. 6
   c. 2
   d. 4
   e. 12
   f. 1
   g. 3
   h. 8
   i. 5
   j. 11
   k. 9
   l. 7
   m. 10
   n. 14

2. a. Gingival crest
   b. Gingiva
   c. Cervical line
   d. Submucosa
   e. Apical foramen
   f. Enamel
   g. Dentin
   h. Pulpal horns
   i. Pulp chamber
   j. Root canals
   k. Periodontal ligament
   l. Alveolar bone
   m. Cementum

3. a. 3
   b. 6
   c. 2
   d. 5
   e. 1
   f. 4
   g. 7

4. a. 4
   b. 10
   c. 3
   d. 7
   e. 6
   f. 1
   g. 11
   h. 8
   i. 9
   j. 2
   k. 5
   l. 14
   m. 12
   n. 13
   o. 15

5. a. 5
   b. 3
   c. 1
   d. 6
   e. 8
   f. 4
   g. 2
   h. 7

6. a. 6 months
   b. 7 1/2 months
   c. 7 months
   d. 9 months
   e. 12 to 14 months
   f. 16 to 18 months
   g. 20 to 24 months
   h. 6 to 7 years
   i. 6 to 8 years

j. 7 to 9 years

k. 9 to 12 years

l. 10 to 12 years

m. 11 to 13 years

n. 11 to 13 years

o. 17 to 21 years

7. a. central incisors

b. lateral incisors

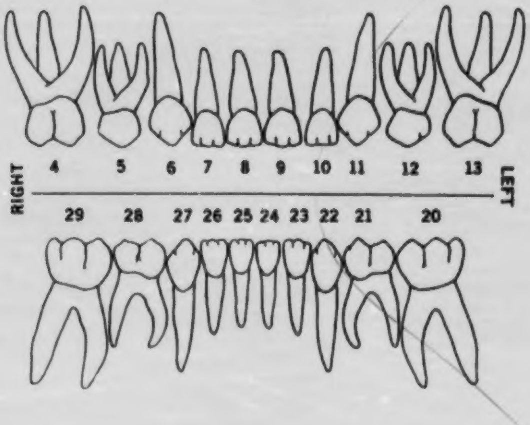
c. cuspids

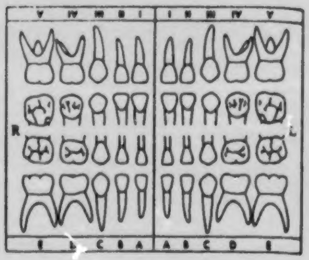
d. first molars

e. second molars

8. a, b, d, g

9.


RIGHT
4
5
6
7
8
9
10
11
12
13
LEFT
29
28
27
26
25
24
23
22
21
20


V
IV
III
II
I
I
II
III
IV
V
R
L
E
D
C
B
A
A
B
C
D
E

10. a. central incisor c. cuspid e. second bicuspid

b. lateral incisor d. first bicuspid f. first molar

g. second molar

h. third molar

i. third molar

j. second molar

k. first molar

l. second bicuspid

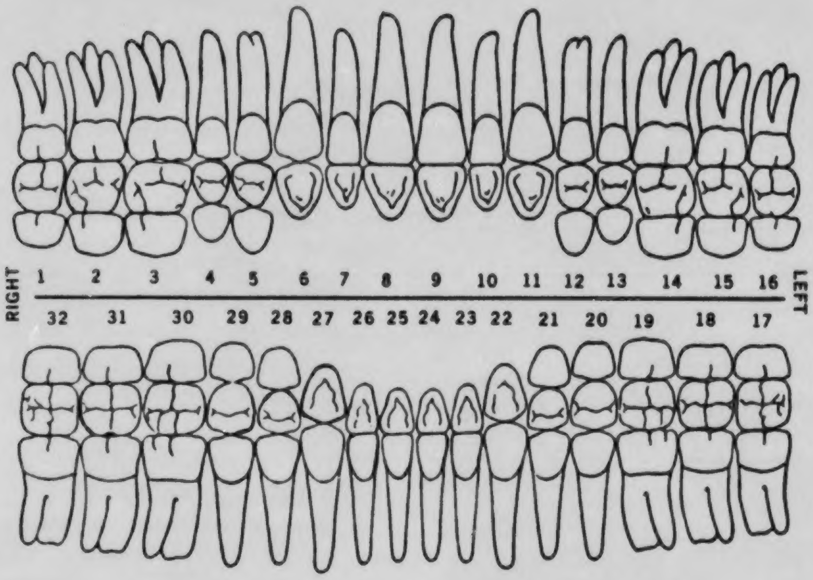
m. first bicuspid

n. cuspid

o. lateral incisor

p. central incisor

11.


RIGHT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
LEFT
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17

12. a. incisal

b. occlusal

c. buccal

d. incisal

e. lingual

f. facial

g. mesial

h. distal

i. distal

j. distal

k. mesial

l. facial

m. lingual

13. a. 7
b. 11
c. 13
d. 3
e. 1
f. 5
g. 9
h. 12
i. 4
j. 2
k. 6
l. 8
m. 10

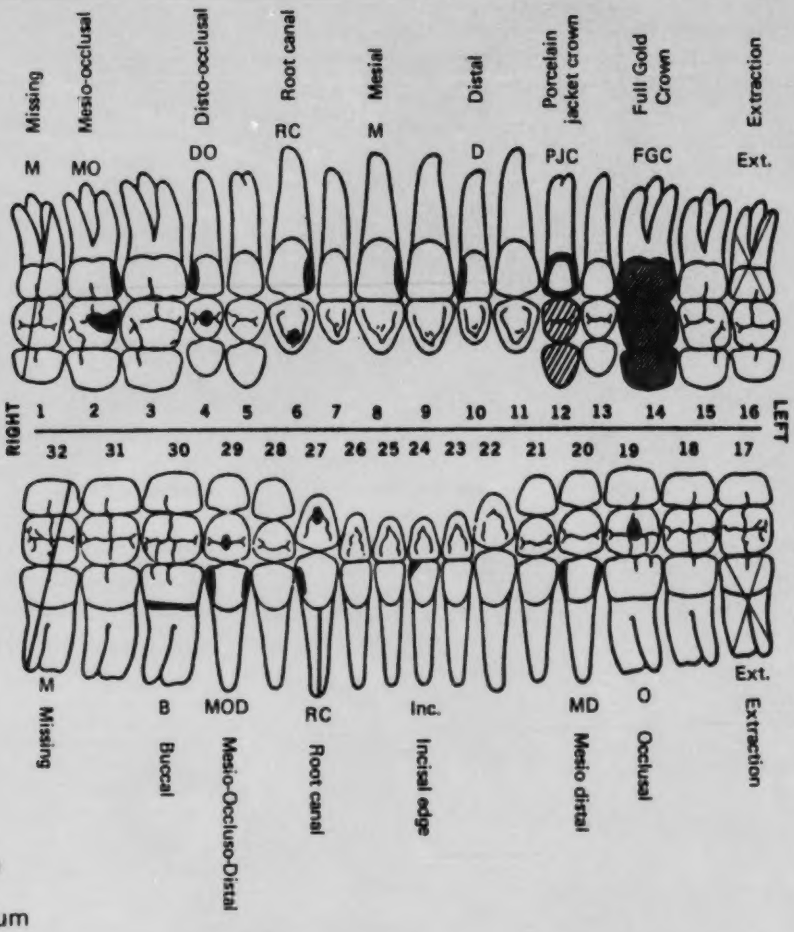
14. a. distal
b. middle
c. mesial
d. occlusal
e. middle
f. cervical
g. cervical
h. middle
i. apical
j. buccal
k. middle
l. lingual
m. apical
n. middle
o. cervical
p. distal
q. middle
r. mesial
s. cervical
t. middle
u. incisal
v. lingual
w. middle
x. labial

15. a. L
b. O
c. I
d. M
e. B
f. D

16. a. DL
b. MI
c. DB
d. ML
e. DO
f. MB
g. MO
h. OL
i. MOD

17. a. 1
b. 7
c. 2
d. 6
e. 4
f. 5
g. 3
h. 12
i. 10
j. 15
k. 16
l. 14
m. 9
n. 8
o. 11
p. 13

18.


Missing
M
Mesio-occlusal
MO
Disto-occlusal
DO
Root canal
RC
Mesial
M
Distal
D
Porcelain jacket crown
PJC
Full Gold Crown
FGC
Extraction
Ext.
RIGHT
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
LEFT
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
M
Missing
B
Buccal
MOD
Mesio-Occluso-Distal
RC
Root canal
Inc.
Incisal edge
MD
Mesio distal
O
Occlusal
Ext.
Extraction

19. a. Fissure
    b. Cingulum
    c. Cusp
    d. Cusp of Carabelli

20. a. Lingual fossa
    b. Central fossa-maxillary molars
    c. Triangular fossa
    d. Central fossa-mandibular molars

21. a. Supplemental groove
    b. Incisal edge
    c. Developmental groove
    d. Lobe
    e. Mamelon

22. a. Oblique ridge
    b. Marginal ridge
    c. Sulcus
    d. Incisal ridge
    e. Triangular ridge
    f. Cusp ridge

23. a. Curved beaks
    b. Base jaw
    c. Index line or zero guide
    d. Straight beaks
    e. Lock
    f. Movable jaw
    g. Fixed scale
    h. Notch
    i. Vernier
    j. Straight edge

24. a. 6.10
    b. 3.36
    c. 5.43
    d. 1.27

25. Evaluated to satisfaction of instructor

26. Evaluated to satisfaction of instructor

27. Performance skills evaluated to satisfaction of instructor

MICROBIOLOGY AND STERILIZATION
UNIT I

UNIT OBJECTIVE

After completion of this unit the student should be able to apply knowledge of microorganisms to guard against disease transmission. The student should also be able to scrub, bag, and autoclave instruments. This knowledge will be evidenced through completion of assignment sheet, job sheets, and unit test with a minimum of 100 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit the student should be able to:

1. Match terms associated with microbiology and sterilization to the correct definitions.
2. Identify parts of microscope.
3. Identify classes of microorganisms.
4. Match diseases to the classes of microorganisms which cause them.
5. Distinguish between types of microorganisms.
6. Select from a list factors influencing growth of pathogens.
7. Complete a chart on types of disease transmission.
8. Name types of instrument preparation.
9. Select from a list methods of sterilizing.
10. Name chemical agents for destroying bacteria.
11. Select from a list factors affecting chemical disinfectants.
12. Arrange in order steps in bagging instruments.
13. Select from a list instruments that must be sterilized by autoclave or dry heat.
14. Distinguish between procedures for maintaining sterile instruments.
15. Record microorganisms from prepared cultures.

16. Demonstrate the ability to:
    - a. Use the microscope.
    - b. Scrub instruments.
    - c. Bag instruments for autoclave.
    - d. Wrap instruments.
    - e. Use cold sterilizer.
    - f. Sterilize using autoclave.
    - g. Sterilize using dry heat.

MICROBIOLOGY AND STERILIZATION
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide student with objective sheet.

  B. Provide student with information, assignment, and job sheets.

  C. Make transparencies.

  D. Discuss unit and specific objectives.

  E. Discuss information and assignment sheets.

  F. Order film.

  G. Demonstrate and discuss procedures outlined in job sheets.

  H. Assign students to research various types of current herpes conditions.

  I. Provide agar for students to use in Assignment Sheet #1.

  (NOTE: Agar can be obtained from your local hospital or through a dental supply company.)

  J. Discuss various instruments to be autoclaved or sterilized in cold sterilizer.

  Examples: Instruments entering the bloodstream, plastic, rubber

  K. Lead a discussion on the importance of safety in the dental office.

  L. Provide materials and equipment for Job Sheets 1 through 7.

  M. Show students examples of chemical disinfectants currently being used in dental offices in your area. Point out to students the importance of adapting to the kind being used in the dental office where they are employed.

  N. Provide equipment and facilities to prepare slides.

  (NOTE: Hair samples are easy to see and are useful for showing methods of transporting airborne disease.)

  O. Prepare practice bags for Job Sheet #2.

    1. Materials:

      a. Sheet of paper, scissors

      b. Pencils or instruments

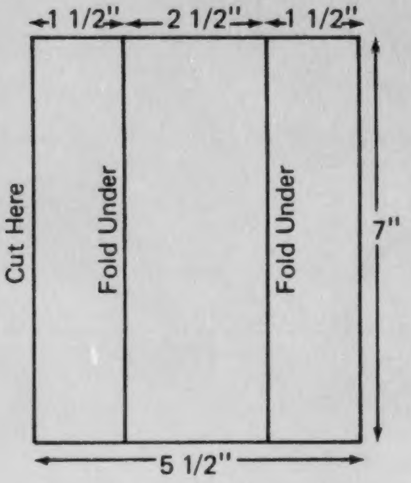
    c. Druggist wrap

    d. Autoclave tape or masking tape (3/4 inch)

  2. Procedure:

    a. Cut out simulated autoclave bag

    b. Seal the center seam and bottom to make a bag


1 1/2"
2 1/2"
1 1/2"
Cut Here
Fold Under
Fold Under
7"
5 1/2"

(NOTE: If you do not have druggist wrap or autoclave tape, use masking tape. Have student label and date bag.)

P. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters

  1. TM 1--Parts of a Microscope

  2. TM 2--Protozoa

  3. TM 3--Fungi

4. TM 4--Bacteria

5. TM 5--Rickettsiae and Viruses

6. TM 6--Sources of Infection

7. TM 7--Methods of Disease Transmission

D. Assignment Sheet #1--Record Microorganisms From Prepared Cultures

E. Job Sheets:

1. Job Sheet #1--Use the Microscope

2. Job Sheet #2--Scrub Instruments

3. Job Sheet #3--Bag Instruments for Autoclave

4. Job Sheet #4--Wrap Instruments

5. Job Sheet #5--Use Cold Sterilizer

6. Job Sheet #6--Sterilize Using Autoclave

7. Job Sheet #7--Sterilize Using Dry Heat

F. Test

G. Answers to test

III. Unit references:

A. Peterson, Shailer, ed. *The Dentist and His Assistant.* 3rd ed. St. Louis: C.V. Mosby Co., 1972.

B. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W.B. Saunders Co., 1976.

C. Goldman, Henry M. and Cohen, Walter D. *An Introduction to Periodontia.* 4th ed. St. Louis: C. V. Mosby Co., 1969.

D. Ehrlich, Ann. *Introduction to Dental Instrument Sterilization and Disinfection.* Champaign: Colwell Systems, Inc., 1974.

E. Rogers, Helen. *Nursing I.* Stillwater, Oklahoma: Curriculum and Instructional Materials Center/State Department of Vocational and Technical Education, 1974.

F. Ortleb, Edward, and Cadice, Richard. *Disease and Health*. St. Louis: Milliken Publishing Co., 1969.

(NOTE: This is a paperback of color transparencies; they are very good, cost $6.00.)

IV. Filmstrips:

A. "Infection Control." Available from Concept Media, P.O.Box 19542, Irvine, CA 92714.

B. "Medical Asepsis." Available from Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

MICROBIOLOGY AND STERILIZATION
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Microorganism--Minute sized living organism

Examples: Bacteria, viruses, rickettsiae, yeast, fungi

(NOTE: They may be a normal part of flora and not produce disease, but they may overgrow and produce disease.)

B. pH--Degree to which solution is acidic or basic

C. Gram positive or gram negative bacteria--Denotes color bacteria takes when a special stain is used

D. Host--Person, animal, or plant which supports a parasite

E. Anaerobe--Microorganism which can live and grow only in the absence of oxygen

F. Aerobe--Microorganism which can live and grow only in the presence of oxygen

G. Communicable disease--Any disease that can be transmitted from one person to another

H. Infectious disease--Any disease caused by growth of pathogenic microorganisms in body

I. Disinfection--Destruction of pathogenic organisms, usually by chemical means

J. Sterilization--Complete destruction of microorganisms and their pathogenic products

K. Sepsis--Presence of disease-producing microorganisms

L. Asepsis--Absence of disease-producing microorganisms

M. Autoclave--Instrument for sterilizing using steam pressure

N. Ultrasonic cleaner--Mechanical means of scrubbing instruments

O. Germicide--Agent that destroys germs

P. Bactericide--Agent used to destroy bacteria

Q. Dry heat sterilizer--Oven-type sterilizer requiring set time and temperature

INFORMATION SHEET

R. Disposable items--Intended for use for one patient only

S. Wiping agent--Weakest link in dental asepsis

T. Contaminated--Soiled, stained or infected by contact or association

II. Parts of a microscope (Transparency 1)

A. Eyepiece

B. Coarse adjustment knob

C. Fine adjustment knob

D. Arm

E. Base

F. Body tube

G. Low power objective lenses

H. High power objective lenses

I. Stage clips

J. Stage

K. Diaphragm

L. Mirror

III. Classes of microorganisms (Assignment Sheet #1)

A. Protozoa (Transparency 2)

(NOTE: These are single-celled microscopic animals. They may be either pathogens or nonpathogens. Those that are pathogens cannot survive freely in nature and must be transmitted by *carriers*.)

B. Fungi (Transparency 3)

1. Molds

2. Yeast cells

C. Bacteria (Transparency 4)

D. Rickettsiae (Transparency 5)

(NOTE: Rickettsiae grow only within the cells of the living host.)

INFORMATION SHEET

E. Viruses (Transparency 5)

(NOTE: Viruses must be able to enter and live on specific cells. For descriptive purposes, they can be divided into three sub-groups on the basis of host specificity: bacterial viruses, animal viruses, and plant viruses.)

IV. Diseases caused by the classes of microorganisms

A. Protozoa--Malaria

(NOTE: Malaria is transmitted to humans by bites of an infected mosquito.)

B. Types of fungi (Transparency 3)

1. Mold--Ringworms
2. Yeast--Thrush

C. Rickettsiae (Transparency 5)

1. Typhus
2. Rocky Mountain spotted fever

D. Bacteria (Transparency 4)

1. Periodontal disease
2. Dental decay
3. Diphtheria
4. Tuberculosis

E. Viruses (Transparency 5)

(NOTE: Lack of proper nutrition, rest, and exercise can lower our resistance to viruses.)

1. Smallpox
2. Measles
3. Herpes simplex (cold sore)

   (NOTE: There are types of herpes viruses that attack the mucosa which can be both destructive and chronic.)

4. Influenza
5. Infectious hepatitis
6. Serum hepatitis

INFORMATION SHEET

V. Types of microorganisms

  A. Pathogenic--Produce disease

  Examples: Syphilis, gonorrhea, tuberculosis, typhus, whooping cough

  B. Nonpathogenic--Essential for life

  Examples: Cheese, sauerkraut, yogurt, buttermilk

VI. Factors influencing growth of pathogens

  A. Moisture

  B. Food

  C. Oxygen

  D. Temperature

  E. pH

  F. Osmotic pressure

  G. Light

INFORMATION SHEET

VII. Types of disease transmission (Transparencies 6, and 7)

TYPES OF DISEASE TRANSMISSION	DESCRIPTION OR CAUSATIVE FACTORS	EXAMPLES	PREVENTIVE TECHNIQUES
Droplet Infection	Numerous droplets of moisture containing bacteria or viruses	Talking Sneezing Coughing Breathing	Use of a facial mask
Self Infection	Microorganisms present in patient's mouth get into the bloodstream--actually infects self	Surgical procedures entering the bloodstream	None
Indirect Transmission	Dirty hands Contaminated articles or instruments	Towels, dirty instruments, Drinking glasses (NOTE: Hepatitis can be indirectly transmitted by cutting instruments containing blood.)	Avoid the use of dirty towels Use your own drinking glass Follow asepis procedures Use proper instrument preparation
Operator Infection	Infection from the dentist or assistant spreads to the patient during operative procedure	Nose, mouth and hands	Use of surgical scrub before and after each patient Wear a facial mask Disinfect dental unit after each patient
Personal Contact	Requires person-to-person contact	Lesions in the oral cavity Through the bloodstream	Use of surgical gloves. Avoid any cuts on fingers or hands
Carrier	Person harboring pathogenic bacteria (NOTE: This person may not have the disease but can pass it to others.)	Tuberculosis Serum hepatitis Venereal diseases	Use asepis procedures after each patient Enforce sterile technique on all instruments and supplies.

INFORMATION SHEET

VIII. Types of instrument preparation

- A. Hand scrubbing
- B. Ultrasonic cleaning

IX. Methods of sterilizing

- A. Autoclave
- B. Dry heat
- C. Cold sterilizer

  (NOTE: A cold sterilizer inhibits the growth of microorganisms but does not kill all spores. All instruments used in the bloodstream should be autoclaved.)

X. Chemical agents for destroying bacteria

- A. Disinfectants
- B. Germicides
- C. Bactericides

XI. Factors affecting chemical disinfectants

(NOTE: Chemical disinfectants should be mixed according to manufacturer's instructions.)

- A. Dilution
- B. Time of exposure
- C. Temperature
- D. pH
- E. Organic matter
- F. Types of microorganisms

  (NOTE: Viruses are more resistant to chemical disinfection than bacteria. Most viruses are susceptible to boiling for 10 minutes with the exception of viruses causing infectious and serum hepatitis. Because of this, boiling is not accepted as a method of sterilizing.)

XII. Steps in bagging instruments

- A. Scrub and group instruments
- B. Label and date instruments

  (NOTE: Take care not to puncture the bag with pen.)

INFORMATION SHEET

C. Slip instruments into bag

D. Close bag with druggist wrap

E. Seal with autoclave tape

XIII. Instruments that must be sterilized by autoclave or dry heat

(NOTE: The Council on Dental Therapeutics of the A.D.A. recommends that all instruments which penetrate the soft tissues be sterilized by autoclaving or by dry heat.)

A. Periodontal instruments

B. Cutting instruments

C. Reusable needles

D. Surgical instruments

E. Syringes

F. Clamps

(CAUTION: All instruments which have been contaminated by hepatitis virus or tuberculosis bacillus, or by potential carriers of these diseases should be sterilized by autoclave or prolonged dry heat.)

XIV. Procedures for maintaining sterile instruments

A. Disinfect

1. Remove from solution after allotted time

2. Rinse and place on towel to dry

3. Arrange in proper tray in drawer

B. Sterilize

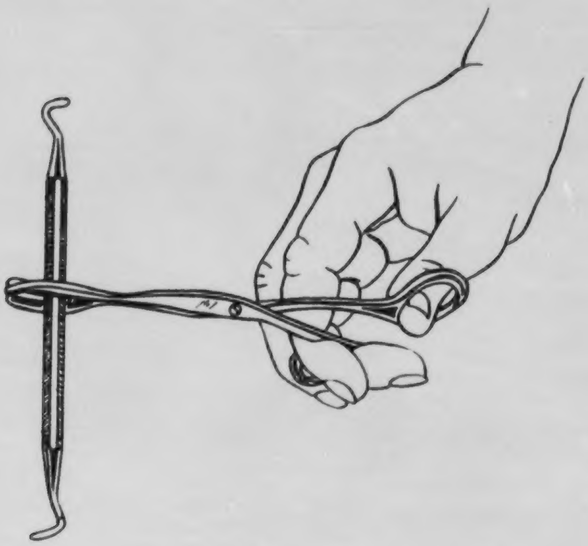
1. Store wrapped instruments in dust-free drawer

2. Re-sterilize every seven weeks

INFORMATION SHEET

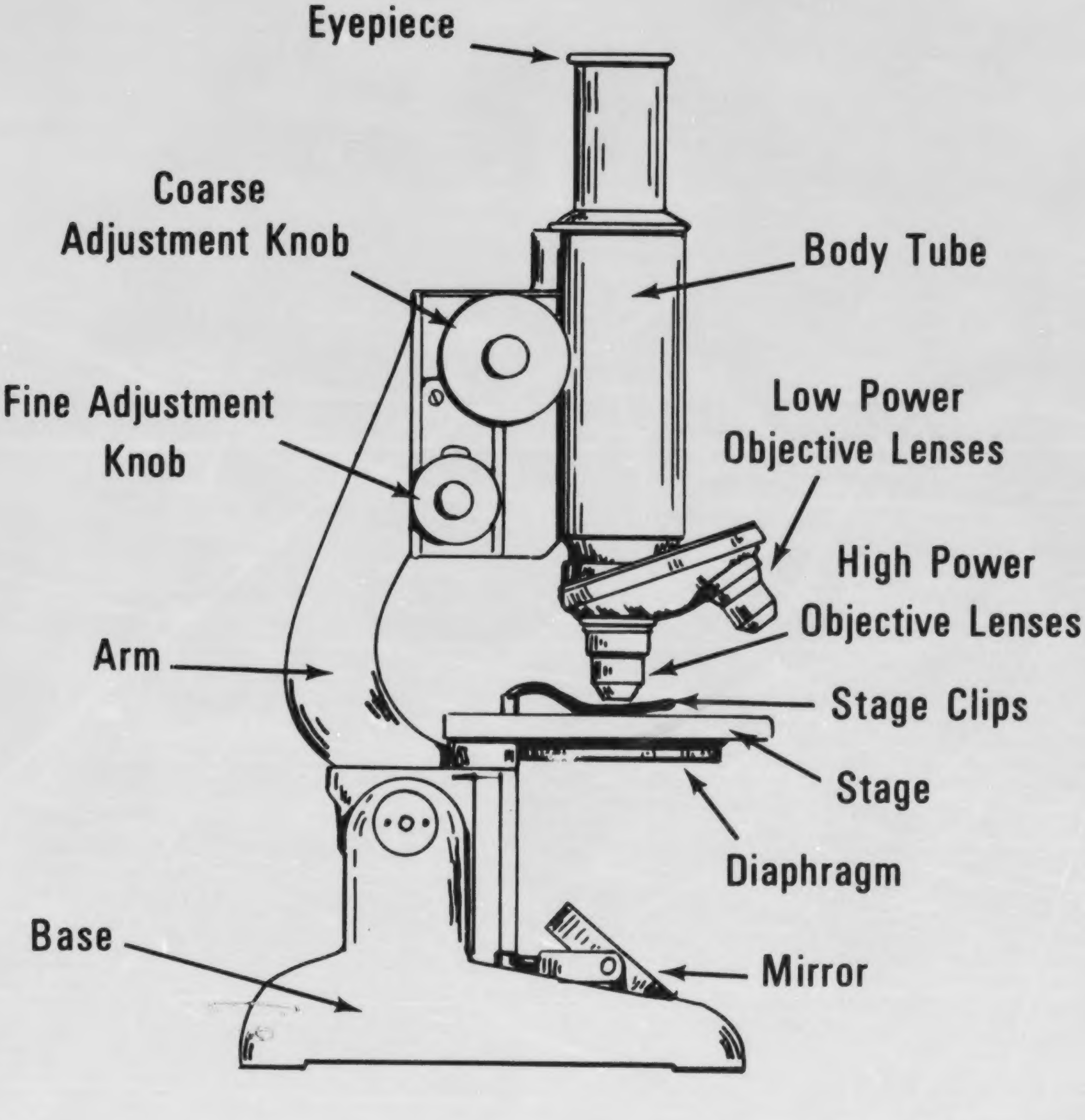
3. Use transfer forceps for unwrapped instruments

(NOTE: Transfer forceps are stored in disinfecting solution, and both forceps and container should be autoclaved weekly.)

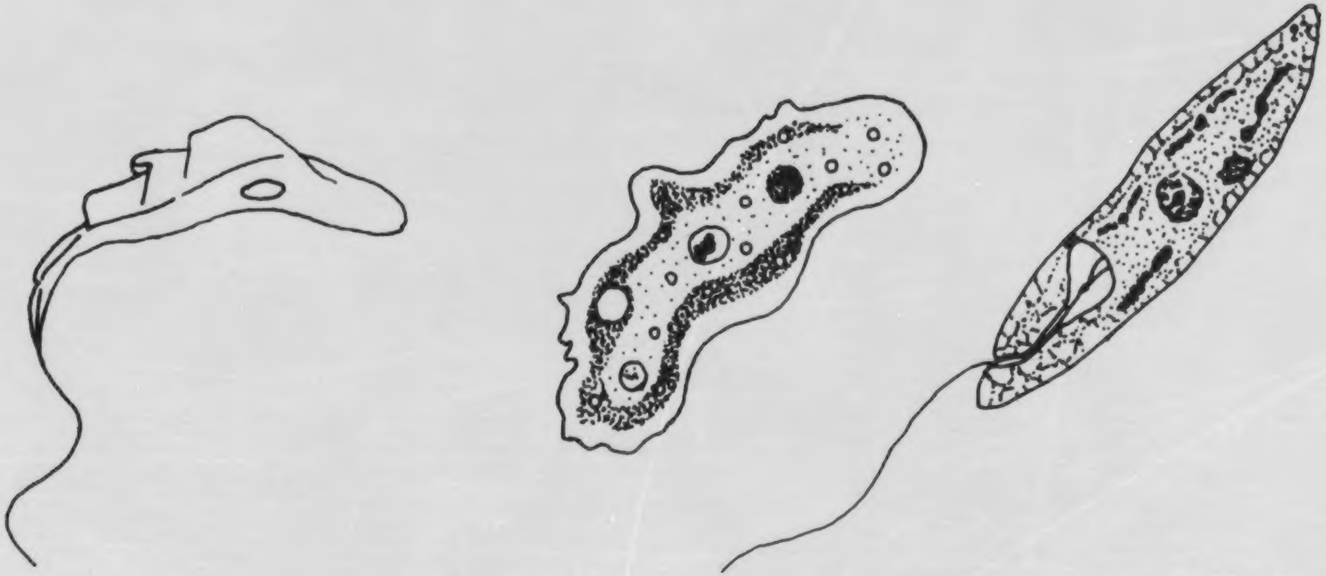


Used with permission of Colwell Systems, Inc. from *Introduction to Dental Instrument Sterilization and Disinfection* by Ann Ehrlich, copyright 1974, p. 37.

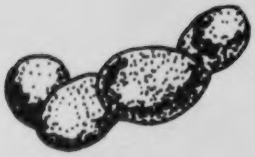
Parts of a Microscope


Eyepiece
Coarse Adjustment Knob
Body Tube
Fine Adjustment Knob
Low Power Objective Lenses
High Power Objective Lenses
Arm
Stage Clips
Stage
Diaphragm
Base
Mirror

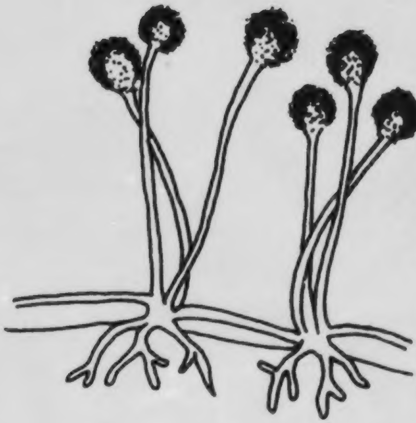
Protozoa



Fungi

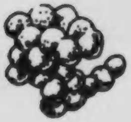


Yeast Cells

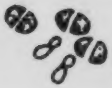


Molds

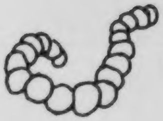
Bacteria



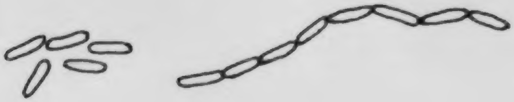
Staphylococci



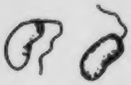
Diplococci



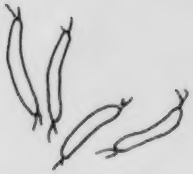
Streptococci



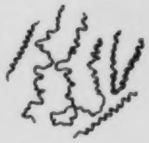
Bacilli (in Chains)



Vibrios



Spirilla

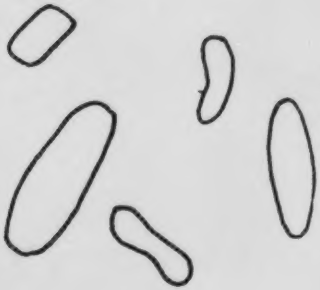


Spirochetes

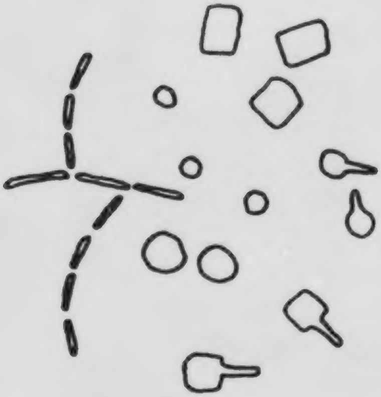
TM 4

Rickettsiae and Viruses

(As Seen Under an Electron Microscope)



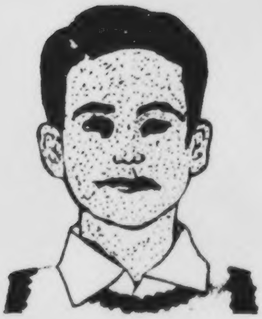
Rickettsiae



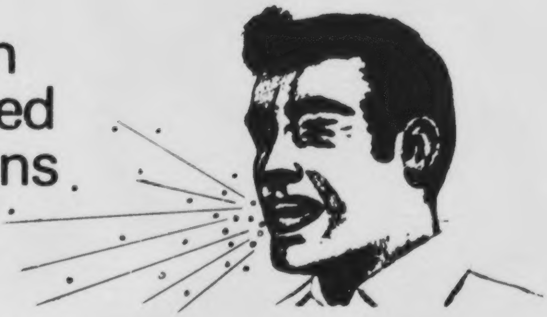
Viruses

TM 5

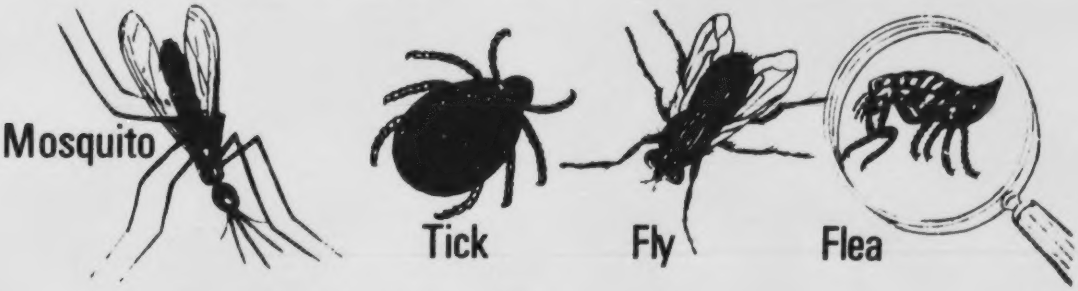
Sources of Infection



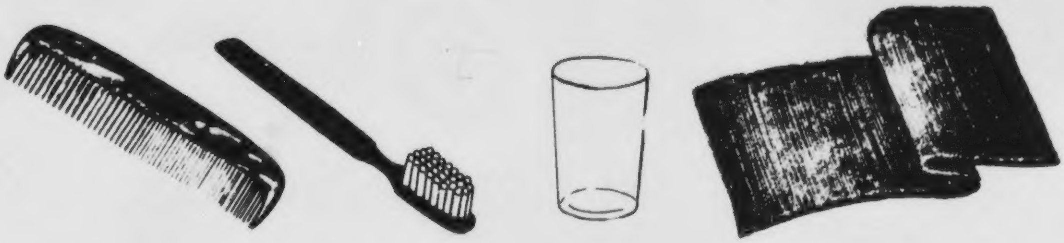
From Infected Persons.



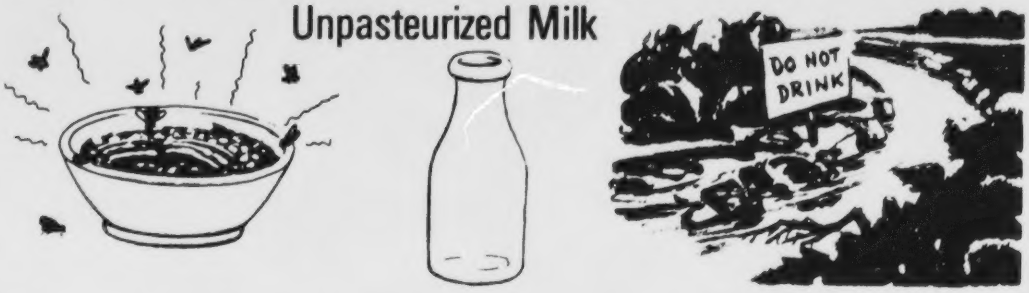
From Insects and Other Animals


Mosquito
Tick
Fly
Flea

From Contaminated Articles

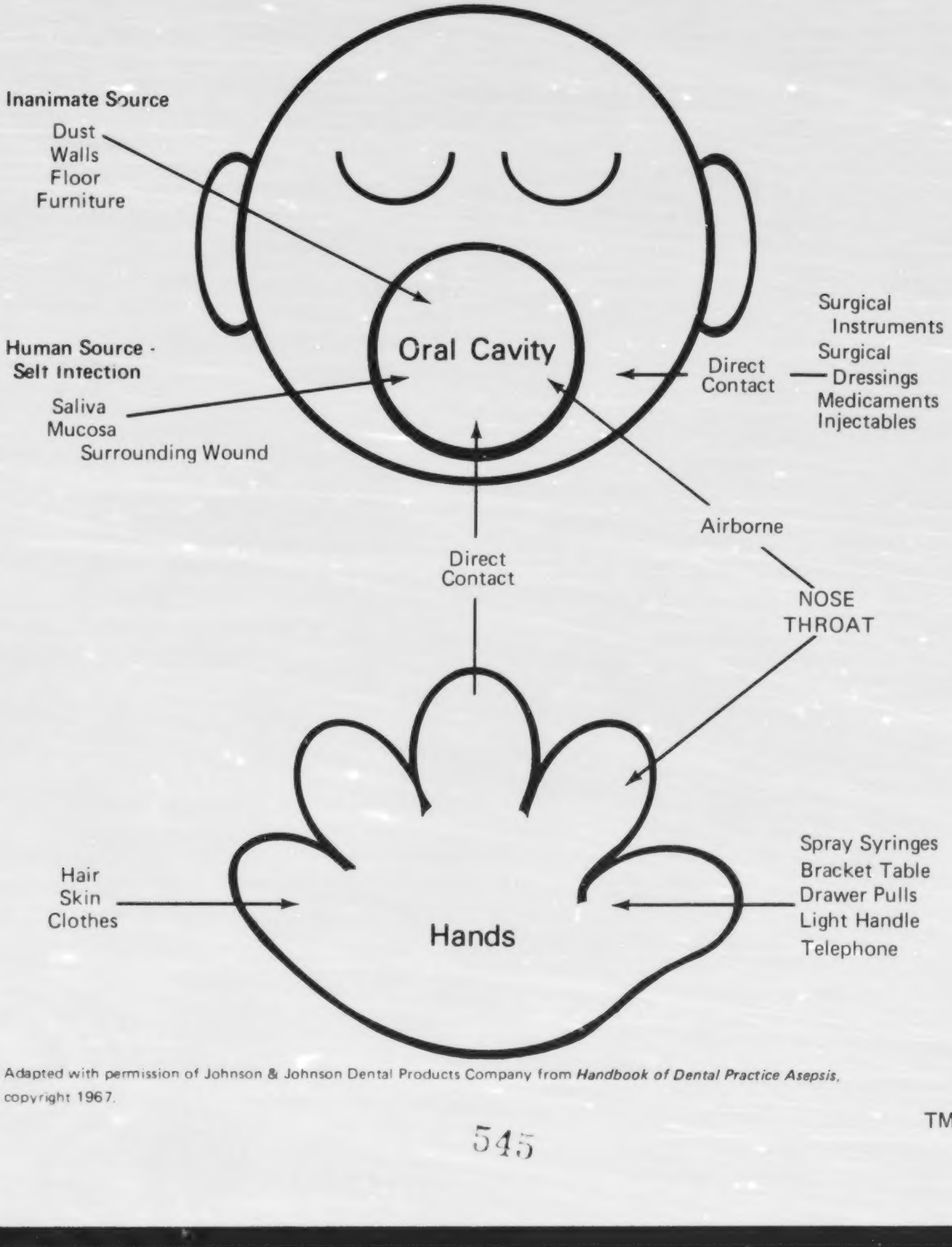


From Contaminated Food and Water


Unpasteurized Milk
DO NOT DRINK

Used with permission of Milliken Publishing Company from *Disease and Health* by Edward Ortleb and Richard Cadice, copyright 1974.

Methods of Disease Transmission


Inanimate Source
Dust
Walls
Floor
Furniture
Oral Cavity
Human Source - Self Infection
Saliva
Mucosa
Surrounding Wound
Direct Contact
Surgical Instruments
Surgical Dressings
Medicaments
Injectables
Airborne
Direct Contact
NOSE THROAT
Hair
Skin
Clothes
Hands
Spray Syringes
Bracket Table
Drawer Pulls
Light Handle
Telephone

Adapted with permission of Johnson & Johnson Dental Products Company from *Handbook of Dental Practice Asepsis*, copyright 1967.

MICROBIOLOGY AND STERILIZATION
UNIT I

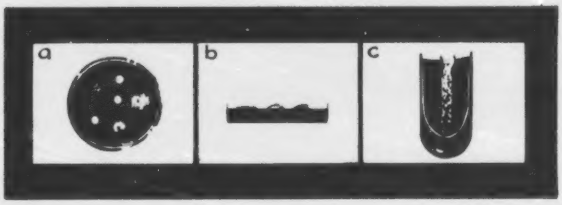
ASSIGNMENT SHEET #1
RECORD MICROORGANISMS FROM PREPARED CULTURES

NAME ______________________ SCORE ________________

Diseases are transmitted in several basic ways: Through the air, through direct or personal contact, through food and water. Often we may be unaware or insensitive to just how easily disease is transmitted.

To demonstrate ease of disease transmission, put agar in petri dish, test tube, or any small container, rub fingers over dental chair arm, then put fingers on agar. Repeat on the floor, cabinet top, dental light. Label each container. Examine your container after five or six days. Compare your findings by sketching or recording in the space provided below.

Dental chair	Floor	Cabinet top	Dental light



Example:
a. Colonies in petri dish (seen from above).
b. Colonies (from side).
c. Bacterial growth in tube of solid medium (from side).

MICROBIOLOGY AND STERILIZATION
UNIT I

JOB SHEET #1--USE THE MICROSCOPE

I. Equipment and materials

A. Blank slide and cover glass (3 of each or reuse)

B. Water and dropper

C. Small newsprint

D. Scissors

E. Microscope

F. Lens paper or clean soft cloth

G. Prepared slide

H. Short pieces of human hair

Examples: Light, dark, fine, coarse, straight, curly

I. Tongue blade

J. Beef bouillon broth

(NOTE: This can be prepared from a regular kitchen bouillon cube. Place cube in pan and add small amount of water. Boil. It can be kept in refrigerator until it turns cloudy. Discard when it becomes cloudy.)

II. Prepare temporary slide

(NOTE: By using an "e" you will learn how to use, adjust and focus the microscope with ease. As you see the "e" in focus, you will know how it should look.)

A. Cut a single "e" from the smallest newsprint available

B. Place the "e" right side up on the slide

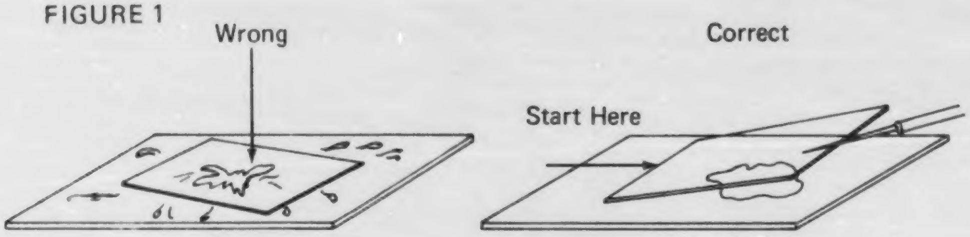
C. Add one drop of water on the top of the "e"

D. Slide cover glass at an angle from the left side of the slide until it touches the water; gently lower onto slide (Figure 1)

(NOTE: Air trapped under the cover glass will interfere with what you see. Therefore, lower the glass slowly at an angle to push air out the side. What you have just prepared is called a wet mount.)

JOB SHEET #1

FIGURE 1



III. Adjust microscope

(NOTE: If you need to move microscope to work area, carefully carry the microscope using both hands, with one hand under base and the other on the arm.)

A. Set microscope in front of you with arm toward you

B. Clean lenses with lens paper or clean soft cloth

C. Turn low power objective into place

(NOTE: When it is in proper position, it will click.)

D. Look through eyepiece and turn mirror toward source of light

(NOTE: Never turn mirror directly toward sun.)

E. Adjust mirror until a uniform circle of shadowless light appears

F. Place prepared slide over hole in stage and center over opening

G. Position the two stage clips to keep slide from moving

(NOTE: If you are using a wet mount, do not tilt arm of microscope.)

H. Turn the coarse adjustment knob to lower the objective as low as possible

(CAUTION: Lower the objective by looking at the microscope from the side. If you look through the eyepiece, you may break the slide.)

I. Look into eyepiece and slowly turn coarse adjustment to raise tube until the object on slide comes into focus

JOB SHEET #1

J. Finish focusing by turning the fine adjustment

(NOTE: As you examine the slide, turn the fine adjustment slowly back and forth, not more than one-half of a turn. This brings out the details at different levels of the object.)

IV. Procedure for viewing human hair

A. Mount a piece of hair in a drop of water

B. Cover it with a cover glass

C. Place the slide on microscope

D. Move hair to center of stage opening

E. Bring hair into focus under the low power objective

F. Turn high power objective into place

G. Focus with fine adjustment

(NOTE: If possible, use several types of hair and make drawings showing the comparison of light and dark hair, fine and coarse hair, and straight and curly hair under microscope. Be sure to label the drawings.)

V. Procedure for viewing saliva

A. Use tongue blade to pick up saliva in mouth

B. Mix a drop of beef broth with saliva on slide

C. Place cover slide on it

D. Place a paper towel over cover glass and press firmly

(NOTE: This is used to seal and blot slide.)

E. Place slide under microscope and adjust to view

VI. Care for microscope

A. Clean and dry slides

B. Clean and dry stage

C. Clean lenses with lens paper

D. Return the objective to low power

E. Turn tube down near the stage, using coarse adjustment

JOB SHEET #1

F. Cover the microscope

G. Return the microscope to its proper storage location

(NOTE: Remember to use both hands while carrying it.)

MICROBIOLOGY AND STERILIZATION
UNIT I

JOB SHEET #2--SCRUB INSTRUMENTS

I. Equipment

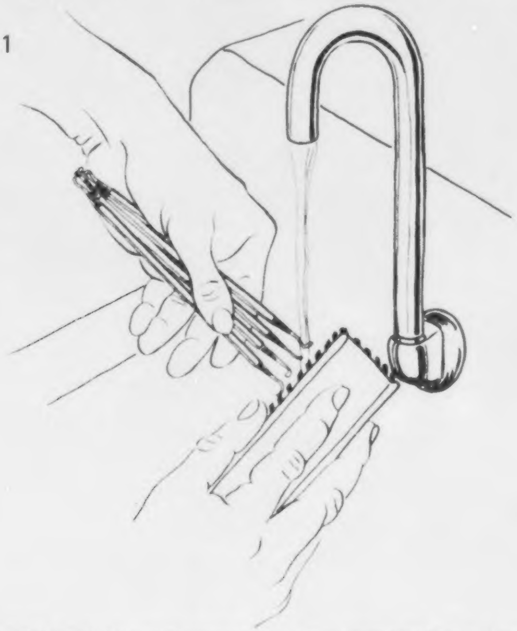
- A. Stiff brush
- B. Soap or cleansing compound
- C. Running water

II. Procedure

- A. Soak instruments
- B. Brush with soap
- C. Brush with running water (Figure 1)
- D. Rinse thoroughly
- E. Drain or dry

(NOTE: Instruments to be used in heat sterilizer must be completely dry.)

FIGURE 1



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MICROBIOLOGY AND STERILIZATION
UNIT I

JOB SHEET #3--BAG INSTRUMENTS FOR AUTOCLAVE

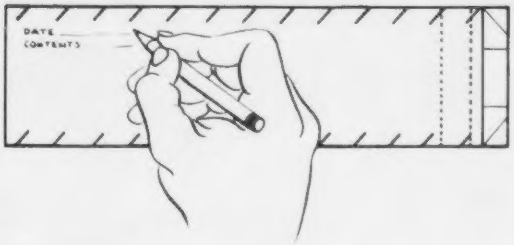
I. Materials

- A. Instruments
- B. Bag
- C. Pencil
- D. Druggist wrap
- E. Autoclave tape

II. Procedure

- A. Scrub and group instruments
- B. Label bag (Figure 1)

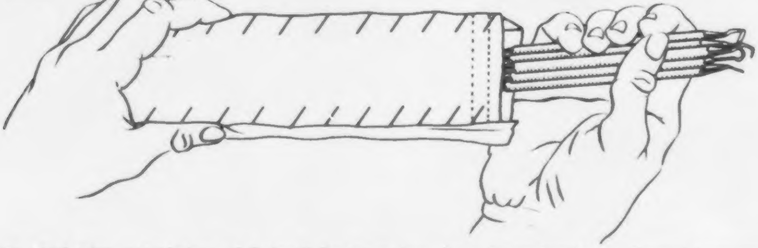
FIGURE 1



- C. Slip instruments into bag (Figure 2)

(NOTE: Take care not to puncture bag.)

FIGURE 2



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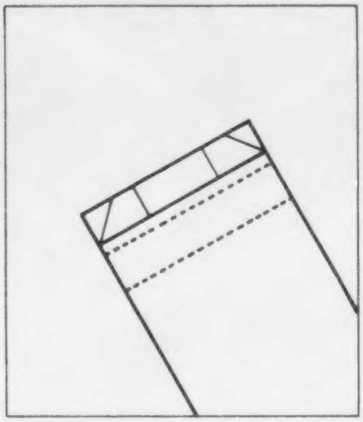
JOB SHEET #3

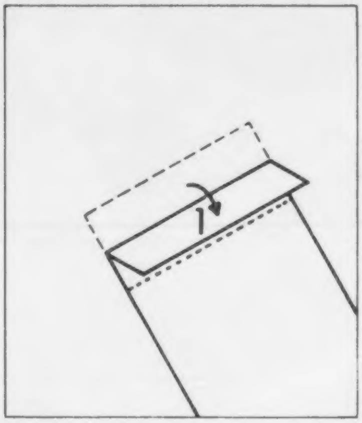
D. Close bag top (Figure 3)

FIGURE 3



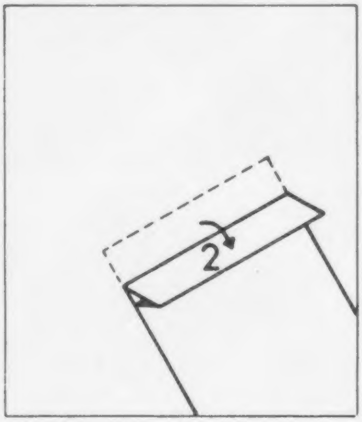
E. Fold over once (Figure 4)

FIGURE 4



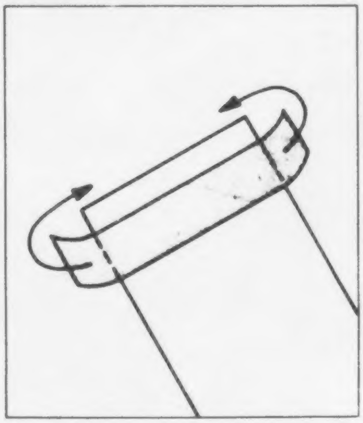
F. Fold again (Figure 5)
(NOTE: Fold so folds are on top of themselves.)

FIGURE 5



G. Seal with autoclave tape (Figure 6)
(NOTE: Wrap ends of tape around sides of bag.)

FIGURE 6



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MICROBIOLOGY AND STERILIZATION
UNIT I

JOB SHEET #4--WRAP INSTRUMENTS

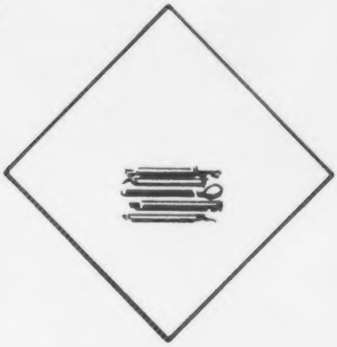
I. Equipment

- A. Cloth or paper wrap
- B. Prepared instruments
- C. Autoclave tape
- D. Pencil

II. Procedure

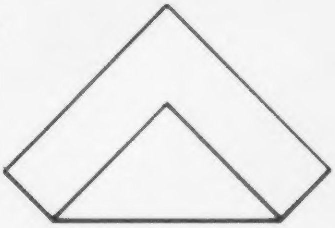
- A. Place instruments on cloth (Figure 1)

FIGURE 1



- B. Make fold (Figure 2)

FIGURE 2



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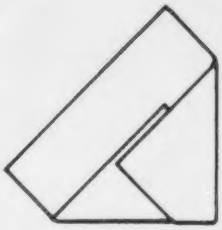
JOB SHEET #4

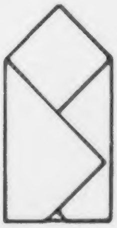
C. Fold left and right sides into center (Figure 3)

FIGURE 3



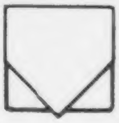
D. Fold sides in again (Figure 4)

FIGURE 4



E. Fold top down (Figure 5)

FIGURE 5



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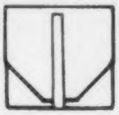
JOB SHEET #4

F. Fold edge under 1/2" and tape with autoclave tape (Figure 6)

FIGURE 6



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(NOTE: Color indicator autoclave tape is made to change color when it has been exposed to steam--however, this does not assure that it has met the proper combination of time, temperature, and steam under pressure that is necessary for sterilization.)

G. Write contents and date on tape

MICROBIOLOGY AND STERILIZATION
UNIT I

JOB SHEET #5--USE COLD STERILIZER

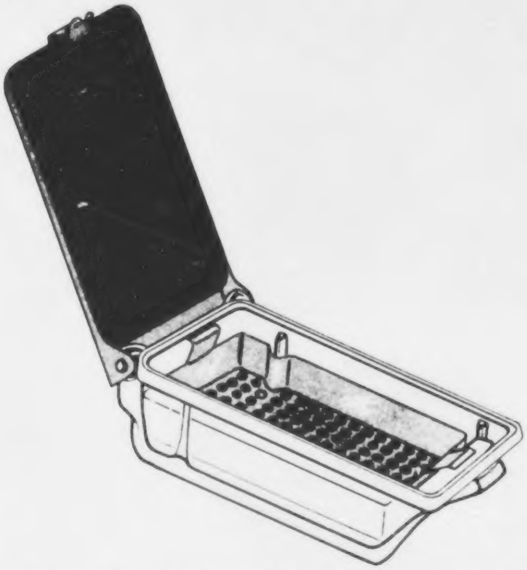
I. Materials

A. Instruments

Examples: Mouth mirrors, explorers, matrix retainers, carver, condensers, hoe, clamps, carriers

B. Cold sterilizer (Figure 1)

FIGURE 1



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C. Chemical disinfectant

D. Water

II. Procedure

A. Scrub, rinse, and drain instruments

B. Prepare disinfectant solution

(NOTE: Follow manufacturer's instructions for mixing solutions. Solution should be changed as soon as it gets cloudy.)

JOB SHEET #5

C. Place instruments in solution and close lid

(NOTE: The solution should completely cover instruments.)

D. Leave instruments in solution fifteen to twenty minutes

E. Remove instruments and rinse

(NOTE: Before picking up instruments, wash hands thoroughly and take care not to touch the "working ends.")

F. Place on clean towel to drain or dry instruments with towel

G. Place instruments in proper place for use

MICROBIOLOGY AND STERILIZATION
UNIT I

JOB SHEET #6--STERILIZE USING AUTOCLAVE

I. Materials

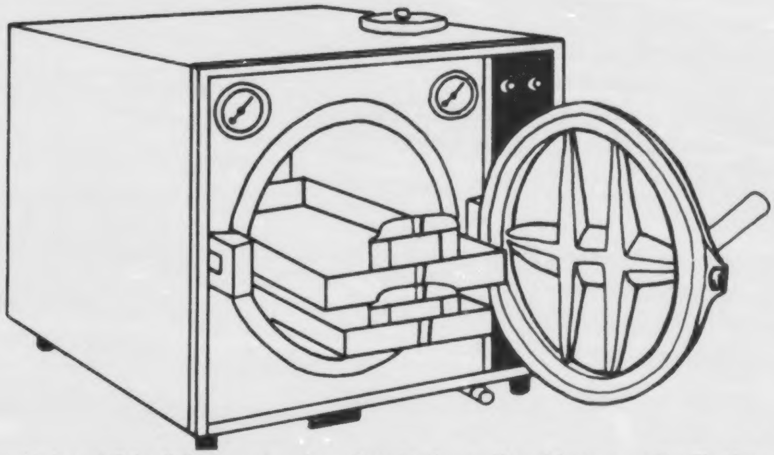
A. Prepared instruments

B. Wrapped materials

C. Autoclave (Figure 1)

(NOTE: Do not put rubber or plastic in autoclave or dry heat sterilizer as they will melt.)

FIGURE 1



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D. Absorbent paper or linen towel

II. Procedure

(NOTE: There are different kinds of autoclaves, so follow manufacturers' instructions for operation.)

A. Prepare to operate

1. Fill water reservoir
2. Press "Fill-Vent" lever

   (NOTE: Water will flow into sterilizer chamber.)

3. Hold lever down until water rises to within one-half inch of rim

JOB SHEET #6

B. Loading

1. Place absorbent paper or linen towel in bottom of tray
2. Open jointed instruments
3. Place jars and containers tipped on sides

   (NOTE: The purpose of tipping containers and jars on side is to let steam enter and sterilize contents.)

4. Load and close door
5. Set timer for fifteen minutes

   (NOTE: This is done to reach desired temperature.)

6. Reset timer for sterilizing

   (NOTE: Automatic timer will shut off heater and energize buzzer when sterilizing cycle is complete.)

Article	Temperature	Time
Unwrapped instruments	270°F	3 minutes
Wrapped instruments	270°F	5 minutes
Cotton dressing and bandages	250°F	20 minutes
Syringes	250°F	20 minutes

7. Press "Fill-Vent" lever and hold down until exhaust noise ceases
8. Swing door handle straight out to release pressure

   (NOTE: Allow three to five minutes for drying before opening door and removing load.)

MICROBIOLOGY AND STERILIZATION
UNIT I

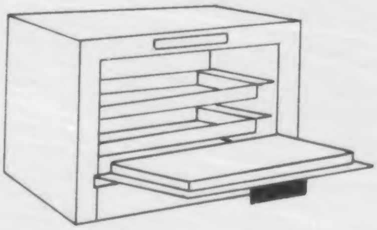
JOB SHEET #7--STERILIZE USING DRY HEAT

I. Materials

A. Instruments and packaged materials

B. Dry heat sterilizer (Figure 1)

FIGURE 1



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II. Procedure

A. Scrub, rinse and DRY instruments

(CAUTION: Instruments will rust if not dried thoroughly.)

B. Group, wrap, and label instruments to be used together

C. Load oven so that air can easily circulate; lay containers and jars on side or tilted

D. Start timing after the oven reaches the proper temperature

(CAUTION: The lower the temperature, the longer the time needed.)

TIME	TEMPERATURE
60 Mins.	340° (170°C)
120 Mins.	320° (160°C)

(NOTE: After correct time has been reached, turn off heat and allow to cool.)

E. Use sterile forceps to transfer to designated place

MICROBIOLOGY AND STERILIZATION
UNIT I

TEST

NAME ______________________________ SCORE _______________

1. Match terms associated with microbiology and sterilization to the correct definitions. Write the correct numbers in the blanks provided.

_____a. Weakest link in dental asepsis

_____b. Any disease caused by the growth of pathogenic microorganisms in body

_____c. Agent used to destroy bacteria

_____d. Person, animal, or plant which supports a parasite

_____e. Intended for use for one patient only

_____f. Any disease that can be transmitted from one person to another

_____g. Instrument for sterilizing using steam pressure

_____h. Mechanical means of scrubbing instruments

_____i. Destruction of pathogenic organisms, usually by chemical means

_____j. Soiled, stained or infected by contact or association

_____k. Minute sized living organism

_____l. Oven-type sterilizer requiring set time and temperature

_____m. Microorganism which can live and grow only in presence of oxygen

_____n. Degree to which solution is acidic or basic

_____o. Complete destruction of microorganisms and their pathogenic products

1. Microorganism
2. pH
3. Bactericide
4. Host
5. Wiping agent
6. Aerobe
7. Communicable
8. Infectious disease
9. Disinfection
10. Sterilization
11. Dry heat sterilizer
12. Contaminated
13. Autoclave
14. Ultrasonic cleaner
15. Disposable items
16. Sepsis
17. Gram positive or gram negative bacteria
18. Asepsis
19. Germicide
20. Anaerobe

______p. Agent that destroys germs

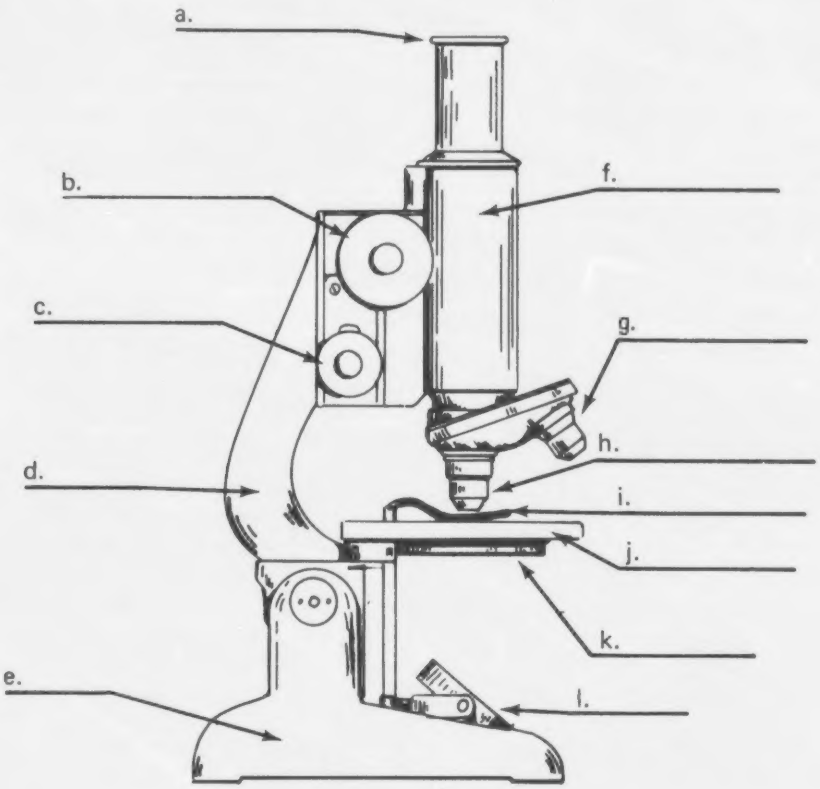
______q. Absence of disease-producing microorganisms

______r. Microorganism which can live and grow only in the absence of oxygen

______s. Denotes color bacteria takes when a special stain is used

______t. Presence of disease-producing organisms

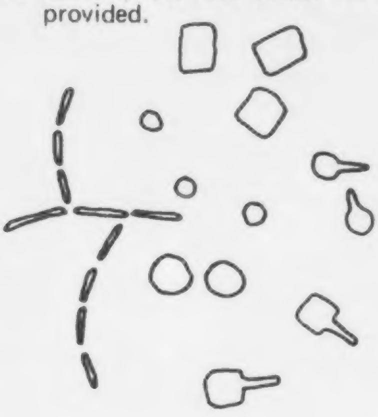
2. Identify parts of a microscope. Write the correct names in the blanks provided.



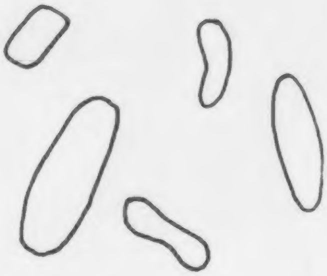
Diaphragm
Base
Coarse adjustment knob
Stage clips
Arm
Mirror

Eyepiece
Fine adjustment knob
Body type
High power objective lenses
Low power objective lenses
Stage

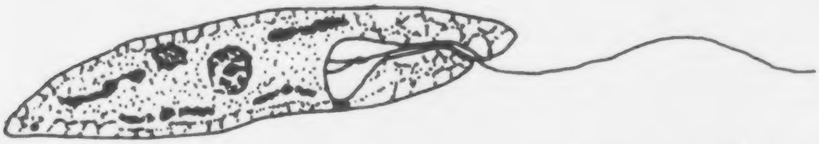
3. Identify the five classes of microorganisms. Write the correct names in the blanks provided.



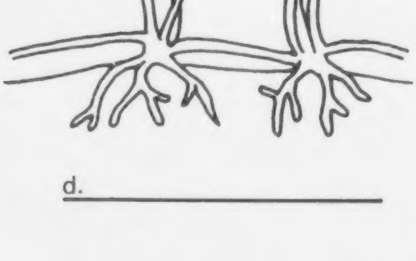
a. ____________________



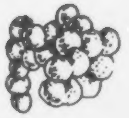
b. ____________________



c. ____________________



d. ____________________



e. ____________________

Rickettsiae
Fungi
Viruses
Bacteria
Protozoa

4. Match diseases to the classes of microorganism which cause them. Write the correct numbers in the blanks provided.

______a. Rocky Mountain spotted fever

______b. Smallpox

______c. Dental decay

______d. Ringworms

______e. Malaria

______f. Periodontal disease

______g. Typhus

______h. Serum hepatitis

______i. Influenza

______j. Measles

______k. Herpes simplex (cold sore)

______l. Diphtheria

______m. Thrush

______n. Tuberculosis

______o. Infectious hepatitis

1. Protozoa
2. Fungi (mold)
3. Fungi (yeast)
4. Rickettsiae
5. Bacteria
6. Viruses

5. Distinguish between types of microorganisms by placing a "P" for pathogenic microorganisms and an "N" for nonpathogenic microorganisms.

______a. Essential for life

______b. Produce disease

6. Select from the list below factors influencing growth of pathogens. Mark each correct answer with an "X."

______a. pH

______b. Food

______c. Osmotic pressure

______d. Attitude

______e. Physical activity

______f. Light

______g. Time of day

______h. Moisture

______i. Oxygen

______j. Environment

______k. Temperature

7. Complete the chart below on disease transmission by writing the appropriate information in the blanks provided.

TYPES OF DISEASE TRANSMISSION	DESCRIPTIVE OR CAUSATIVE FACTORS	EXAMPLES	PREVENTIVE TECHNIQUES
Droplet Infection	Numerous droplets of moisture containing bacteria or viruses	Talking Sneezing Coughing Breathing	a.____________________
b.____________________	Microorganisms present in patient's mouth getting into the bloodstream--actually infects self	Surgical procedures entering the bloodstream	None
Indirect Transmission	c.____________________	Towels, dirty instruments, drinking glasses	Avoid the use of dirty towels, use your own drinking glass Follow asepis procedures Use proper instrument
Operator Infection	Infection from the dentist or assistant spreads to the patient during operative procedure	d.____________________	Use surgical scrub before and after each patient Wear a facial mask Disinfect dental unit after each patient
Personal Contact	Requires person-to-person contact	Lesions in the oral cavity; through the bloodstream	e.____________________
f.____________________	Person harboring pathogenic bacteria	Tuberculosis Serum hepatitis Venereal diseases	Use asepis procedures after each patient Enforce sterile technique on all instruments and supplies

8. Name two types of instrument preparation.

   a. ______________________________

   b. ______________________________

9. Select from the list below methods of sterilizing. Mark each correct answer with an "X."

   _____a. Alcohol

   _____b. Ultrasonic cleaner

   _____c. Cold sterilizer

   _____d. Soap

   _____e. Dry heat

   _____f. Autoclave

10. Name chemical agents for destroying bacteria.

    a. ______________________________

    b. ______________________________

    c. ______________________________

11. Select from the list below factors affecting chemical disinfectants. Mark each correct answer with an "X."

    _____a. pH

    _____b. Time exposure

    _____c. Water

    _____d. Organic matter

    _____e. Contamination

    _____f. Types of microorganisms

    _____g. Temperature

    _____h. Calculus

    _____i. Dilution

12. Arrange in order steps in bagging instruments by placing a "1" for the first step, a "2" for the second step, and so on.

    ______a. Slip instruments into bag

    ______b. Label and date instruments

    ______c. Close bag with druggist wrap

    ______d. Seal with autoclave tape

    ______e. Scrub and group instruments

13. Select from the list below instruments that must be sterilized by autoclave or dry heat. Mark each correct answer with an "X."

    ______a. Clamps

    ______b. Knives

    ______c. Cutting instruments

    ______d. Spatulas

    ______e. Periodontal instruments

    ______f. Plastic vacuum tip

    ______g. Surgical instruments

    ______h. Reusable needles

    ______i. Rubber dam

    ______j. Burs

    ______k. Syringes

14. Distinguish between procedures for maintaining sterile instruments by placing a "D" for procedures involving disinfectants and a "S" for procedures involving sterilizers.

    ______a. Resterilize every seven weeks

    ______b. Rinse and place on towel to dry

    ______c. Remove from solution after allotted time

    ______d. Use transfer forceps for unwrapped instruments

    ______e. Arrange in proper tray in drawer

    ______f. Store wrapped instruments in dust-free drawer

15. Record microorganisms from prepared cultures.

16. Demonstrate the ability to:

    a. Use the microscope.

    b. Scrub instruments.

    c. Bag instruments for autoclave.

    d. Wrap instruments.

    e. Use cold sterilizer.

    f. Sterilize using autoclave.

    g. Sterilize using dry heat.

(NOTE: If activities 15-16 have not been completed prior to the test, ask your instructor when they should be finished.)

MICROBIOLOGY AND STERILIZATION
UNIT I

ANSWERS TO TEST

1.	a.	5	f.	7	k.	1	p.	19
	b.	8	g.	13	l.	11	q.	18
	c.	3	h.	14	m.	6	r.	20
	d.	4	i.	9	n.	2	s.	17
	e.	15	j.	12	o.	10	t.	16

2.	a.	Eyepiece	g.	Low power objective lenses
	b.	Coarse adjustment knob	h.	High power objective lenses
	c.	Fine adjustment knob	i.	Stage clips
	d.	Arm	j.	Stage
	e.	Base	k.	Diaphragm
	f.	Body tube	l.	Mirror

3. a. Viruses
   b. Rickettsiae
   c. Protozoa
   d. Fungi
   e. Bacteria

4.	a.	4	f.	5	k.	6
	b.	6	g.	4	l.	5
	c.	5	h.	6	m.	3
	d.	2	i.	6	n.	5
	e.	1	j.	6	o.	6

5. a. n
   b. p

6. a, b, c, f, h, i, k

7. a. Use of a facial mask
   b. Self infection
   c. Dirty hands, contaminated articles, or instruments
   d. Nose, mouth, and hands
   e. Use of surgical gloves; avoid any cuts on fingers or hands
   f. Carrier

8. a. Hand scrubbing
   b. Ultrasonic cleaning

9. c, e, f

10. a. Disinfectants
    b. Germicides
    c. Bactericides

11. a, b, d, f, g, i

12. a. 3
    b. 2
    c. 4
    d. 5
    e. 1

13. a, c, e, g, h, k

14. a. s d. s
    b. d e. d
    c. d f. s

15. Evaluated to satisfaction of instructor

16. Performance skills evaluated to satisfaction of instructor

BACTERIOLOGY, DENTAL CARIES, AND ORAL PATHOLOGY
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to record microscopic findings, remove plaque samples with curette, assist in incision draining of apical abscess, and prepare bacterial cultures. This knowledge will be evidenced by completion of assignment sheet, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with bacteriology, dental caries, and oral pathology to the correct definitions.
2. Select from a list factors influencing growth of microorganisms.
3. Identify forms of bacteria.
4. Select from a list types of bacteria that produce tooth decay.
5. Describe plaque and its formation.
6. Arrange in order chain reaction of bacteria in the oral cavity.
7. State methods of controlling dental caries.
8. Name examples of snack foods to aid in caries control.
9. Identify specialized structures of bacteria.
10. Select from a list symptoms of an acute inflammation reaction.
11. Select from a list treatments for acute inflammation.
12. Arrange in order stages of inflammation repair.
13. Match diseases of oral soft tissue to the correct definitions.
14. Distinguish between primary malignant tumors of the oral cavity.
15. Match secondary oral disorders to the correct definitions.
16. Record microscopic findings.
17. Demonstrate the ability to:
    a. Remove plaque sample and mount slide.
    b. Assist in incision draining of apical abscess.

BACTERIOLOGY, DENTAL CARIES, AND ORAL PATHOLOGY
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information, assignment, and job sheets.

   C. Order film.

   D. Make transparencies.

   E. Discuss information sheet.

   F. Demonstrate and discuss assignment and job sheets.

   G. Provide equipment and facilities for assignment and job sheets.

   H. Use an extracted tooth to drill out the pulp for students to use in Job sheet #2.

   I. Invite a bacteriologist or pathologist to speak with class on bacteria prevention and cancer-causing factors.

   (NOTE: This may be used as a HOSA activity.)

   J. Invite an endodontist or periodontist to speak on caries, periodontal disease and root canal therapy.

   K. Demonstrate how mouth bacteria reacts with refined sugars by determining the acidity of the mouth with litmus paper before and after eating foods containing sugar.

   (NOTE: This is accomplished by letting the saliva build up in the mouth, by not swallowing for a few minutes, then dipping litmus paper in the lingual or buccal surface. Use the litmus paper guide for color change of high and low.)

   L. Ask a student to bring two firm apples to class. Compare the apple with anatomy of a tooth.

   Example: Skin-enamel, fruit part-dentin, core-pulp

   Punch a hole into the core of one apple and examine both apples each day. After several days, cut the apples in half and observe the difference.

   M. Have students research hidden sugars found in foods.

   Examples: Grocery store, health food stores, textbooks

   (NOTE: On most canned goods, frozen foods, and cereals, a high sugar content will be listed first or second on the ingredient label as sugar or sucrose.)

N. Role play the following situation:

An emergency patient came in the office with an abscessed tooth; the mandibular cheek and the tissue below it was swollen. After drainage of the abscess, the patient was relieved of pain and began asking questions.

1. What caused my toothache?
2. Where did the pus come from?

Sample responses:

a. Toothaches can be caused by an inflammation of the tooth's nerves or as a result of pressure on the tooth nerve caused by swelling.

b. Pus comes from inflamed or injured area around the tooth and is made up of dead cells and bacteria.

O. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters:

1. TM 1--Phagocytosis
2. TM 2--Cocci and Bacilli
3. TM 3--Vibrios, Spirilla, and Spirochetes
4. TM 4--Accumulative Changes in Plaque
5. TM 5--Specialized Structures of Bacteria
6. TM 6--Cellulitis of the Jaw
7. TM 7--Tissue Changes in Inflammation

D. Assignment Sheet #1--Record Microscopic Findings

E. Job Sheets

1. Job Sheet #1--Remove Plaque Sample and Mount Slide
2. Job Sheet #2--Assist in Incision Draining of Apical Abscess

F. Test

G. Answers to test

III. References:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W. B. Saunders Co., 1976.

B. Schwarzrock, Shirley Pratt, and Jensen, James R. *Effective Dental Assisting.* Dubuque: Wm. C. Brown Company, 1975.

C. Anderson, Pauline C. *The Dental Assistant.* Albany, New York: Delmar Publishers/Litton Educational Publishing, Inc., 1974.

D. Volpe, Margret E. *Related Studies for Dental Assistant--Anatomy and Physiology.* Bergen County Vocational-Technical High School, Hackensack, New Jersey, 1973.

E. Colby, Robert A., Kerr, Donald A., and Robinson, Hamilton B.G. *Color Atlas of Oral Pathology.* 3rd ed. Philadelphia: J.B. Lippincott Co., 1971.

IV. Films:

A. "Dental Caries-Prevention and Control." (order #M-3229-X) 1976, available on a free-loan basis from National Medical Audio-Visual Center (Annex) Station K, Atlanta, Georgia 30324.

B. "Dental Pulp Disease-Diagnosis and Case Selection." (order #M-3191-X) 29 min. 1971. Available from National Medical Audio-Visual Center (Annex) Station K, Atlanta, Georgia 30324.

C. "Trigger Foods." 8 1/2 minutes, 1971. Available on a free-loan basis from Oklahoma Dental Foundation for Research and Education, 629 N.W. Expressway, Okla. City, Okla. 73118.

BACTERIOLOGY, DENTAL CARIES, AND ORAL PATHOLOGY
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Bacteria--One-celled organisms visible only through a microscope

B. Pathogen--Any disease-producing agent or microorganism

C. Bacterium--Microscopic bit of protoplasm with nuclear material scattered throughout and surrounded by a cell wall

D. Capsule--Gelatinous outer wall of a bacterium

E. Spore--Coating developed by a very few bacteria for protection from unfavorable conditions

F. Phagocytosis--Engulfment of bacteria by white blood cells (Transparency 1)

G. Toxin--Poisonous substance produced by some bacteria

H. Symbiosis--Ability of separate species of microbes to live together

I. Antibiosis--Association in which one species of microorganisms prevents growth of or destroys another species

J. Flagellum--Hairlike process on a bacterium or protozoan which gives it mobility

K. Dental caries--Progressive destruction of tooth enamel by bacterially-produced acids

L. Plaque--Soft mucinous material filled with microorganisms

M. Pathology--Concerned with injury to tissue and response of the body to repair this injury

N. Inflammation--Reaction of the body to injury or pathogenic microorganisms

O. Abscess--Localized collection of pus in tissue

P. Hypertrophy--Overgrowth of an organ or a part due to increase in size of cells

Q. Hyperplasia--Increased number of cells in an individual tissue over and above normal

R. Granulation tissue--Tissue formed as part of healing process

S. Koplik's spots--Oral lesions of measles

T. Trauma--Wound or injury

INFORMATION SHEET

U. Ulcer--An open lesion

V. Geographic tongue--Center of tongue appears slick and smooth, while the edges are red and inflamed

(NOTE: The rash migrates from time to time, resembling a geographic map. This condition is poorly understood but harmless.)

W. Pyogenic--Pus-producing

X. Anthrax--Acute infectious disease which sometimes occurs as a malignant edema (swelling) of skin

II. Factors influencing growth of microorganisms

(NOTE: These are all the necessary requirements for bacteria to grow in your mouth and on the tongue surface.)

A. Darkness

B. Temperature

C. Moisture

D. Oxygen

E. Food

III. Forms of bacteria (Transparencies 2 and 3)

A. Sphere or round forms-cocci

(NOTE: The singular is coccus and the plural is cocci.)

1. Diplococci

(NOTE: Diplococci appear in pairs after division.)

2. Streptococci

(NOTE: Streptococci cling together in long chains after dividing.)

3. Staphylococci

(NOTE: Staphylococci arrange themselves in grapelike clusters.)

B. Rod or cylinder shapes--bacilli

(NOTE: Bacilli, which cause tuberculosis, may survive for long periods of time in saliva and dried blood. These bacteria can be transmitted to other persons who have cuts or skin lesions. Tuberculosis is still common in some parts of the United States.)

INFORMATION SHEET

C. Spiral forms

1. Vibrios

(NOTE: These are short, slightly bent rods with a flagellum at one end.)

2. Spirilla

(NOTE: These are longer, rigid, curved organisms, usually with several spirals and several flagella.)

3. Spirochetes

(NOTE: These are longer, flexible, and motile spiral organisms.)

IV. Types of bacteria that produce tooth decay (Assignment Sheet #1)

(NOTE: Much research is being done in this area, but at the present time the following species are believed to be the major causes of tooth decay.)

A. Streptococci

B. Lactobacillus species

C. Filamentous rods (bacilli)

D. Staphylococci

V. Plaque and its formation (Transparency 4)

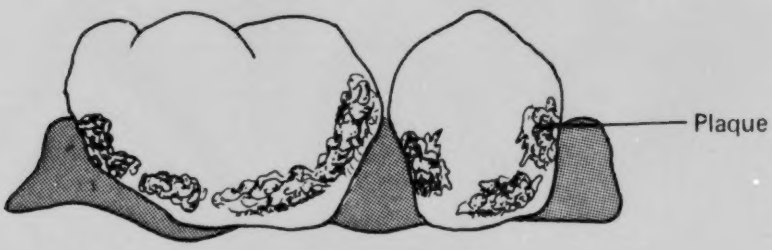
A. Bacterial plaque which adheres to teeth is of the streptococcus species

B. Rapid growing streptococcus begins to attach to the teeth

C. Film of saliva mucin covers the mouth even after cleaning and polishing

D. Streptococcus grows in the mucinous deposits to form early stages of plaque

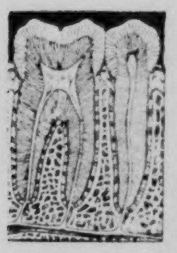
(NOTE: This plaque does not cause decay, but it forms a plaque in which other bacteria grow and cause decay.)

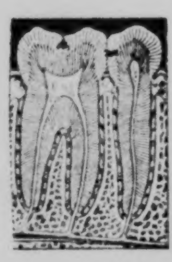


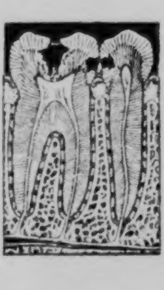
INFORMATION SHEET

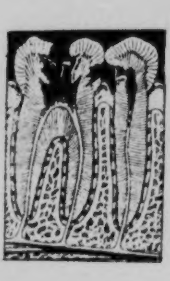
VI. Chain reaction of bacteria in the oral cavity

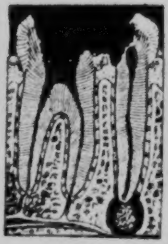
- A. Bacteria react with sugars in the mouth and multiply rapidly
- B. Colonized bacterial plaque becomes attached to tooth surfaces
- C. Breakdown of sugar by these bacteria produce acids
- D. Acids begin decalcification of tooth enamel
- E. Decaying process enters into dentin
- F. Further decay reaches pulp
- G. Decay involves periapical (root) part of tooth


Normal Tooth Structure


Enamel Involvement


Dentin Involvement


Dental Pulp Involvement


Periapical Involvement

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VII. Methods of controlling dental caries

- A. Cleaning teeth immediately after eating
- B. Reducing frequency of intake of carbohydrates
- C. Fluoridating water supplies
- D. Applying topical fluorides by approved techniques
- E. Restoring carious lesions early

INFORMATION SHEET

VIII. Snack foods to aid in caries control

Drinks	Vegetables & fruit	High protein	Cereals & bread
Grape juice	Cherry tomatoes	Tuna	Tacos
Milk	Cucumbers	Turkey	Pretzels
Sugar-free soda	Green peppers	Nuts	Popcorn
Tea with sugar substitute	Celery	Boiled eggs	Corn chips
Vegetable juice	Carrots	Chicken	Bread sticks
Grapefruit juice	Peaches	Cheese	Wheat toast
Beef broth	Apples	Cheese dips	Rye toast
Chicken broth	Grapes	All kinds of spread	

IX. Specialized structures of bacteria (Transparency 5)

A. Spores

(NOTE: All dental personnel should keep their tetanus vaccines up to date since spores can cause tetanus.)

B. Capsules

C. Flagella

X. Symptoms of an acute inflammation reaction (Transparency 7)

A. Redness

B. Swelling

C. Warmth

D. Pain

XI. Treatments for acute inflammation

A. Rest

B. Applications of heat or cold

INFORMATION SHEET

C. Open drainage

Example: Laceration

(NOTE: This allows bacteria to escape and aids in relief of pain.)

D. Specific drugs

Example: Antibiotics

E. Natural defenses

XII. Stages of inflammation repair (Transparencies 1, 7)

(NOTE: Inflammation repair usually occurs in a progressive manner in order that the individual cell may be healed.)

A. Enzymes or immune bodies are released

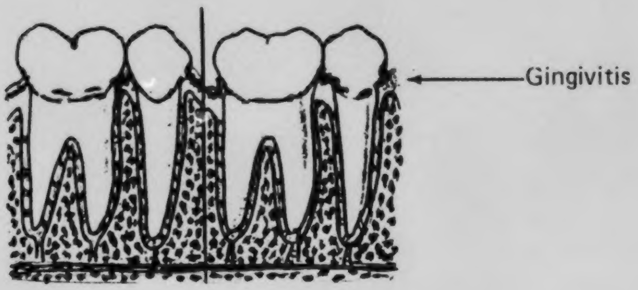
B. Foreign matter is engulfed by white cells in the bloodstream

C. Digestive bacteria, dead cells or other debris are carried away by the blood

XIII. Diseases of the oral soft tissue (Periodontal disease)

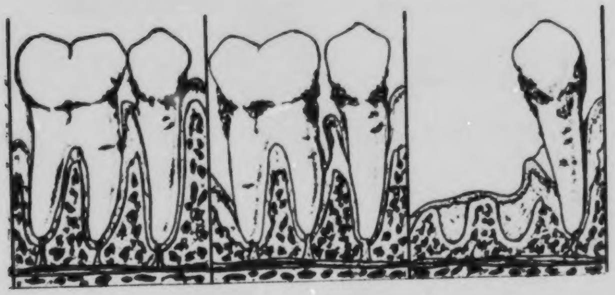
A. Gingivitis--Inflammation of the gingival tissue

(NOTE: The inflammation is the result of plaque and calculus, vitamin deficiencies, or temporary metabolic disorders.)



INFORMATION SHEET

B. Periodontitis (pyorrhea)--Sequel of gingivitis in which inflammation has proceeded apically to involve the alveolar process



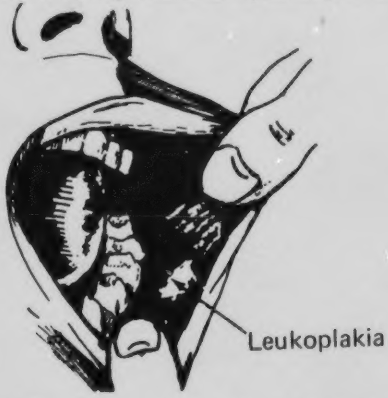
C. Pericoronitis--Inflammatory process occurring in the gingival "flaps" of tissue found over partially erupted teeth

D. Necrotizing ulcerative gingivitis--(Vincent's infection or trench mouth) Painful inflammatory condition with necrosis (death of cell) of gingival tissue

(NOTE: This disease is characterized by bad breath and grayish-yellow ulcers. Preventive measures are good oral hygiene, rest, exercise, and proper diet.)

E. Pyogenic granuloma (pregnancy tumor)--Inflammatory lesion associated with deep periodontal pockets

F. Leukoplakia--Disease affecting mucosa, especially in the oral cavity



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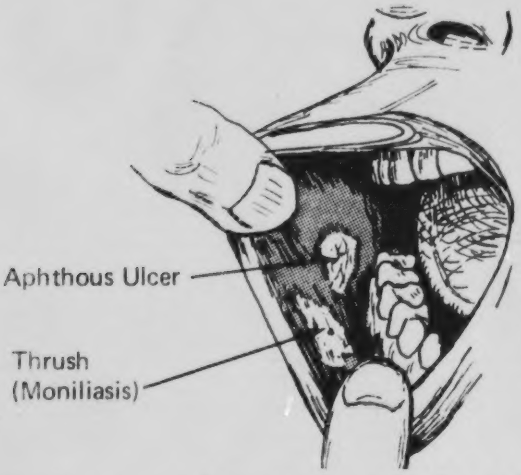
INFORMATION SHEET

G. Cellulitis--Inflammation that spreads through the substance of tissue if not controlled (Transparency 6)

(NOTE: This condition is often accociated with periapical, periodontal, and pericoronal infections. Swelling develops rapidly, with fever and throbbing pain. As this condition continues, cracks occur on the skin, mucous membranes and the lips.)

H. Aphthous ulcer--Disease characterized by recurring outbreaks of blister-like sores inside mouth and on tongue and lips



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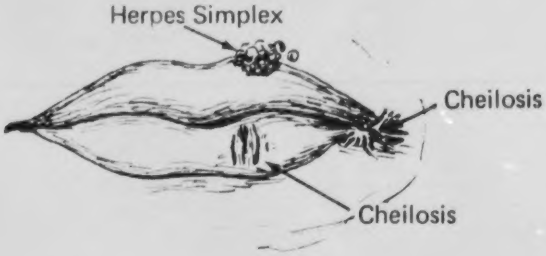
I. Moniliasis (thrush)--Oral infection caused by a fungus which appears as white or blue-white patches; varies in form from small dots to extensive plaques

J. Herpes simplex (fever blister or cold sore)--One or more viruses which cause recurrent sores on the lips



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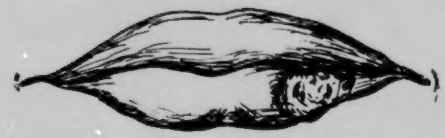
INFORMATION SHEET

K. Cheilosis--Fissured condition of the lips and angles of the mouth

(NOTE: This is associated with a vitamin deficiency.)

XIV. Primary malignant tumors of the oral cavity

A. Squamous cell carcinoma--Starts with superficial ulcer or thickening of area



Squamous Cell Carcinoma of Lip

B. Adenocarcinoma--Arises from submucous glands, appearing as a lump beneath the mucosa

(NOTE: There are other malignant tumors of the jaw bone, but the ones mentioned above are of most concern to the dental assistant.)

XV. Secondary oral disorders

(NOTE: Many systemic diseases manifest themselves in the oral cavity before there is evidence in other parts of the body; this is the reason they are called secondary oral disorders.)

A. Measles--Contagious disease caused by a virus, marked by spots and lesions of the oral cavity in early stages

(NOTE: Another type of measles is rubella [*German measles*]. Both types may be prevented by the administration of vaccine.)

B. Mumps--Contagious disease caused by virus, marked by inflammation and swelling of the parotid gland

(NOTE: Due to swelling of the cheek and neck, pain often occurs when opening the mouth. Mumps may be prevented by vaccine.)

INFORMATION SHEET

C. Tetanus (lockjaw)--Acute infectious disease caused by toxins produced in the body, with tonic spasm of the masseter muscles

(NOTE: Tetanus can be prevented by the administration of a vaccine; however, immunity must be maintained through booster doses.)

D. Diabetes mellitus--Metabolic disorder caused by lack of insulin; marked by excessive quantity of urine

(NOTE: Some of the oral manifestations are fruit *acetone* breath, dehydration of the oral soft tissues, and swollen red gingiva. Diabetes later affects the alveolar bone and periodontal ligaments.)

E. Pernicious anemia--Severe deficiency of hemoglobin in the blood

(NOTE: The oral manifestation is a burning sensation or numbness, a smooth bright red tongue and pale oral mucosa.)

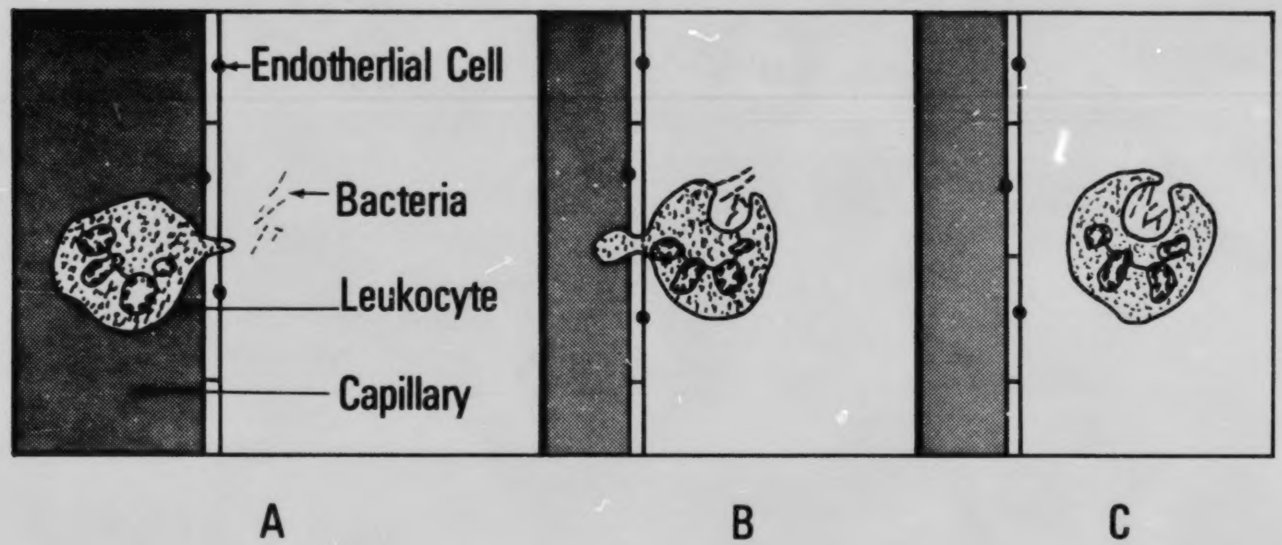
F. Leukemia--Disease of the blood-forming organs

(NOTE: Oral symptons include hemorrhage and ulcerative, spongy texture of the gingiva.)

G. Epilepsy--Disorder characterized by one or more of the following: recurring impairment or loss of consciousness, psychic or sensory disturbance

(NOTE: Epilepsy is discussed here because the use of anticonvulsive drugs in its treatment can cause hyperplasia of gums.)

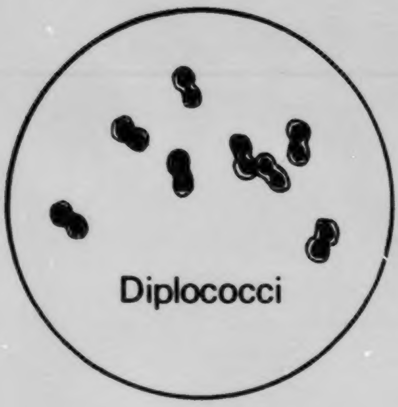
Phagocytosis

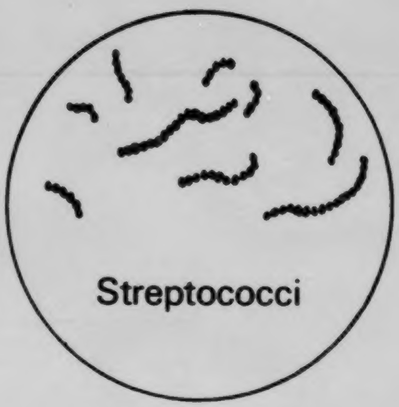

Endotherlial Cell
Bacteria
Leukocyte
Capillary
A
B
C

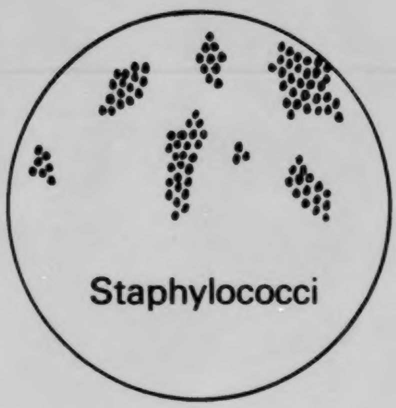
(A) A white blood cell squeezing itself through a capillary wall, in the region of an infection. (B) and (C) The white cell engulfing the bacteria, part of the body's process of fighting infection.

Cocci and Bacilli

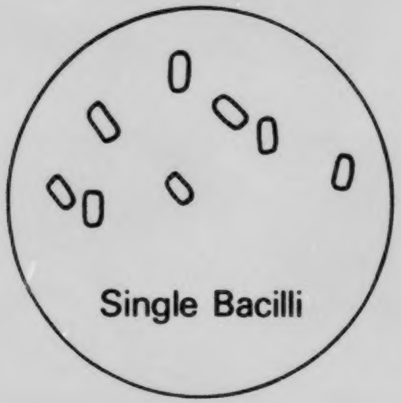
Cocci

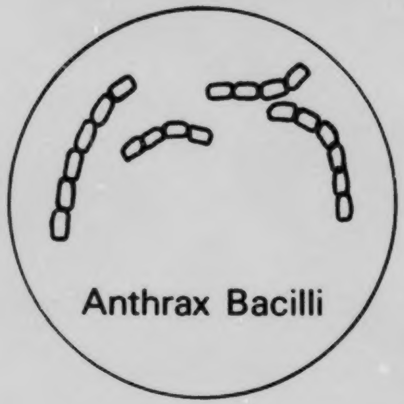

Diplococci

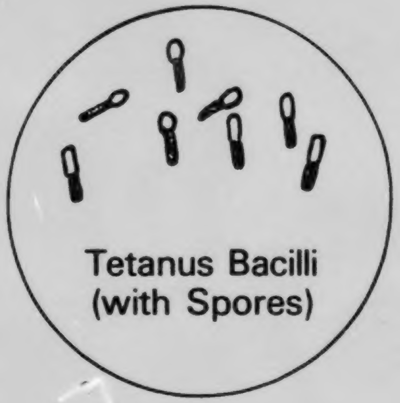

Streptococci


Staphylococci

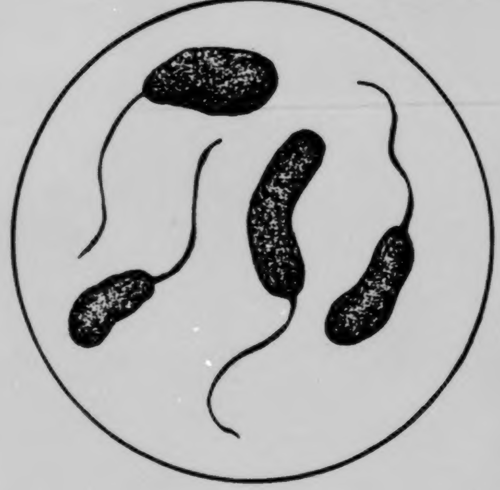
Bacilli


Single Bacilli

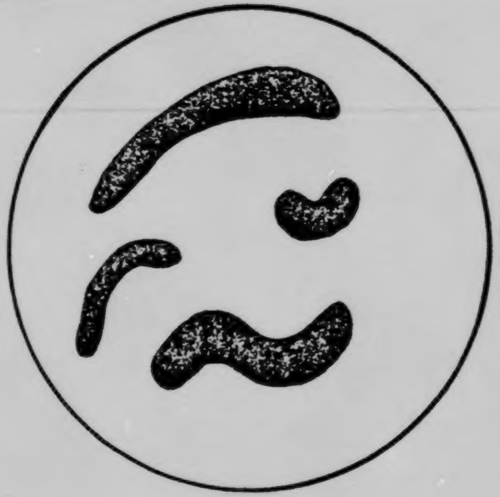

Anthrax Bacilli


Tetanus Bacilli
(with Spores)

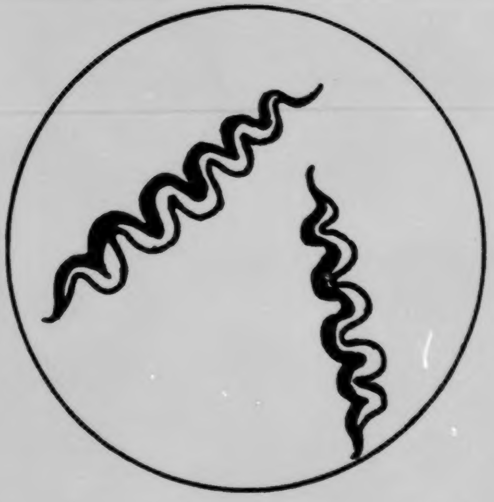
Vibrios, Spirilla, and Spirochetes



Vibrios

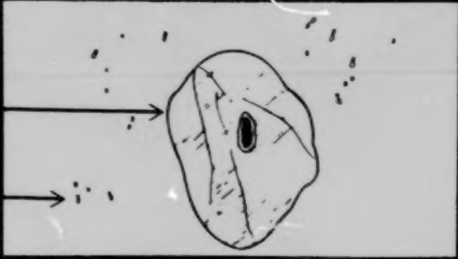
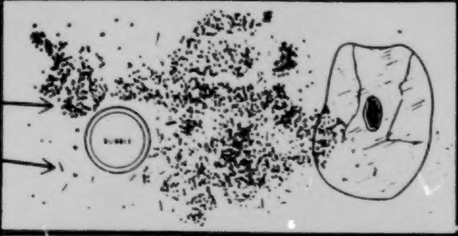
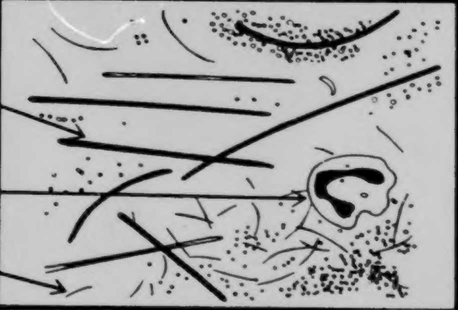
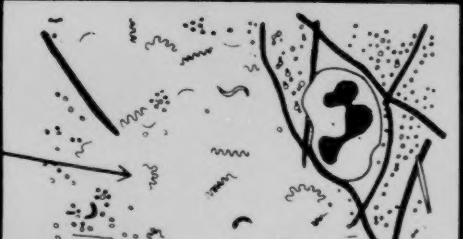


Spirilla



Spirochetes

Accumulative Changes in Plaque

I. Epithelial Cells and Few Cocci		Well Cleaned Mouth
II. Masses of Cocci and Shortrods		No Cleaning for: 1-2 Days ↓
III. Filamentous Bacteria Leukocyte Fusobacteria		4-7 Days ↓
IV. Spirochetes Vibrios		1-2 Weeks ↓
Gingival Health Restored After 3-5 Days of Effective Brushing and Flossing		Acute Gingivitis Appears in About 2-3 Weeks

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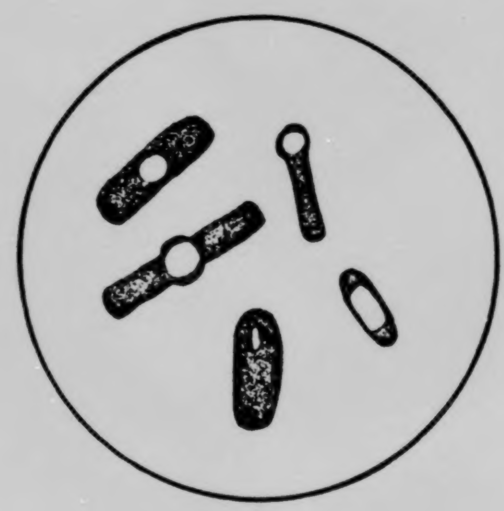
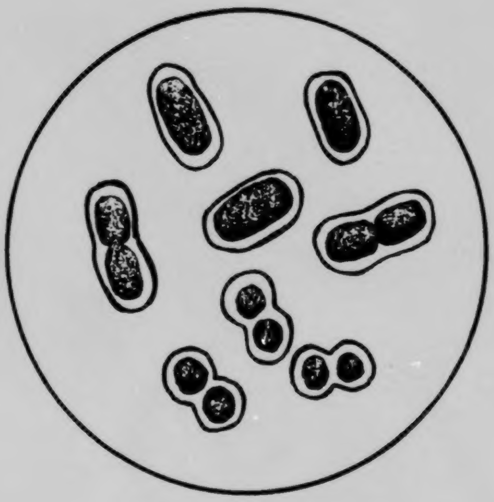
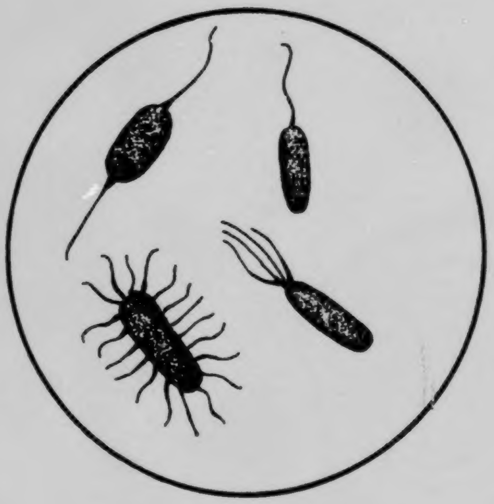
Specialized Structures of Bacteria



Spores
(White Structures)



Bacteria With Capsules

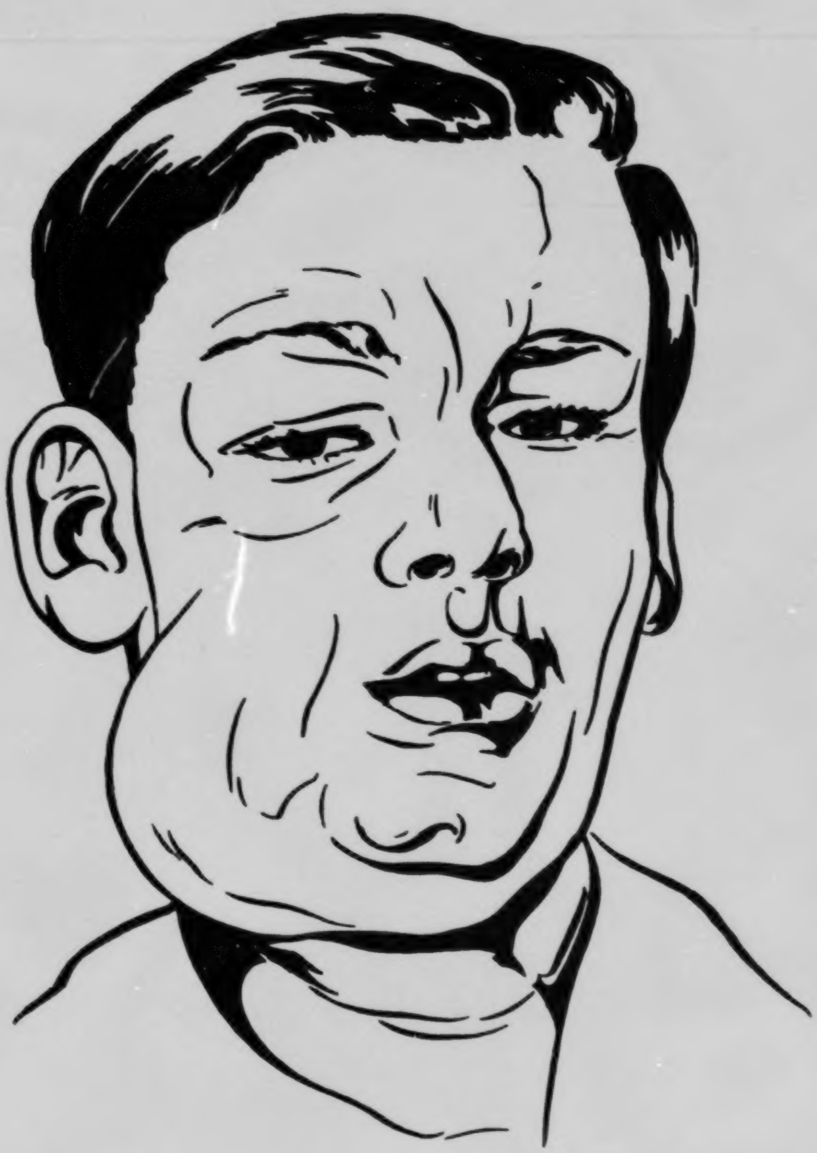


Flagella

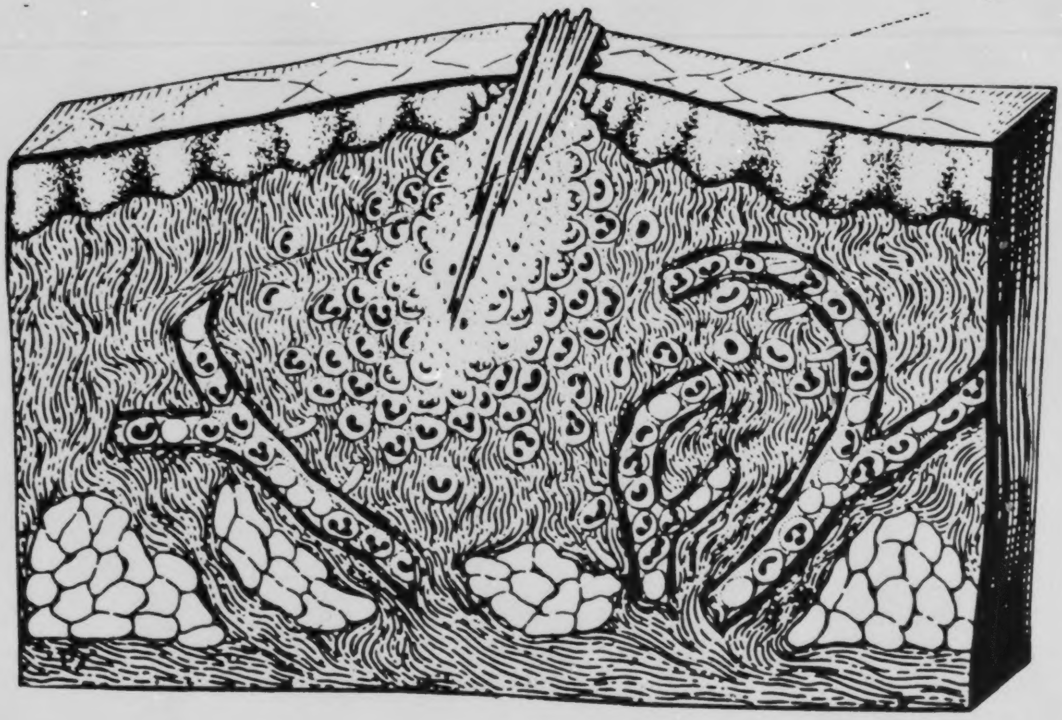
TM 5

DA - 83-D

Cellulitis of the Jaw



Tissue Changes in Inflammation



BACTERIOLOGY, DENTAL CARIES AND ORAL PATHOLOGY
UNIT II

ASSIGNMENT SHEET #1--RECORD MICROSCOPIC FINDINGS

NAME ______________________ SCORE ______________________

In a well-cleaned mouth only a few nonmobile cocci and epithelial cells are seen. Plaque samples from an ineffective cleaning technique will consist of masses of cocci and a tangled network of filamentous bacteria. If you find numerous spinning, vibrio, and spirochete forms in addition to the filamentous and coccal masses, this area has not been cleaned in over a week.

After completion of Job Sheet #1, complete the following chart:

OBSERVED FORMS OF BACTERIA

	yes	no	Sketch here
Staphylococci			
Streptococci			
Diplococci			

ASSIGNMENT SHEET #1

	yes	no	Sketch here
Vibrios			
Spirochetes			
Others			
Others Others			

BACTERIOLOGY, DENTAL CARIES, AND ORAL PATHOLOGY
UNIT II

JOB SHEET #1--REMOVE PLAQUE SAMPLE AND MOUNT SLIDE

I. Equipment

  A. Curette

  B. Prepared beef broth in a bottle

  C. Eye dropper

  (NOTE: You may use any type of dip to obtain a tiny drop of broth from the bottle.)

  D. 2 slides

  E. Paper towel or tissue

  F. Pencil

II. Procedure

  A. Use the curette to remove a tiny speck of plaque from the molars at gingival margin area

  B. Place a tiny drop of broth on slide

  C. Tease the plaque sample into the broth

  D. Place a cover glass over slide

  E. Press glass in a circular motion with rubber part of pencil

  (NOTE: This is done to disperse the plaque.)

  F. Place paper towel over slide and press to seal

  G. Blot slide

  H. Place slide on microscopic stage

  I. Turn the 40x objective into position for viewing

  J. Consult manufacturer's directions for procedure to adjust condenser beneath stage of microscope

BACTERIOLOGY, DENTAL CARIES, AND ORAL PATHOLOGY
UNIT II

JOB SHEET #2--ASSIST IN INCISION DRAINING OF APICAL ABSCESS

I. Equipment

A. Disinfectant (preference)

B. Sterile swab

C. Surgical scalpel (knife)

D. Surgical gauze 2x2

E. Prepared syringe

(NOTE: A block injection will be used for this procedure.)

II. Procedure

A. Advise patient that some discomfort is likely

B. Use surgical hand scrub

C. Hand doctor disinfectant swab

D. Pass syringe (Use palm grip technique)

E. Pass scalpel

F. Observe incision lancing

(NOTE: The site will drain freely and the patient will have instant relief.)

G. Use gauze to absorb drainage

H. Instruct patient in home care

I. Advise patient to return for additional treatment after swelling and infection has cleared

J. Dismiss patient

K. Clean operatory

L. Scrub hands

BACTERIOLOGY, DENTAL CARIES, AND ORAL PATHOLOGY
UNIT II

TEST

NAME ____________________ SCORE ____________

1. Match terms associated with bacteriology, dental caries, and oral pathology with the correct definitions. Place the correct numbers in the blanks provided. Answers to a-m are on this page.

_____a. Progressive destruction of tooth enamel by bacterially-produced acids

_____b. Engulfment of bacteria by white blood cells

_____c. Concerned with injury to tissue and response of body to repair this injury

_____d. Microscopic bit of protoplasm with nuclear material scattered throughout and surrounded by a cell wall

_____e. Ability of separate species of microbes to live together

_____f. Any disease-producing agent or microorganism

_____g. Hairlike process on a bacterium or protozoan which gives it mobility

_____h. Gelatinous outer wall of a bacterium

_____i. One-celled organisms visible only through a microscope

_____j. Coating developed by a very few bacteria for protection from unfavorable conditions

_____k. Association in which one species of microorganisms prevents growth or destroys another species

_____l. Soft mucinous material filled with microogranisms

_____m. Poisonous substance produced by some bacteria

1. Bacteria
2. Pathogen
3. Bacterium
4. Capsule
5. Spore
6. Phagocytosis
7. Toxin
8. Symbiosis
9. Antibiosis
10. Flagellum
11. Dental caries
12. Plaque
13. Pathology

______n. Increased number of cells in an individual tissue over and above normal

______o. Acute infectious disease which sometimes occurs as a malignant edema (swelling) of skin

______p. Oral lesions of measles

______q. Pus-producing

______r. Reaction of body to injury or pathogenic microorganisms

______s. Overgrowth of an organ or a part due to increase in size of cells

______t. Center of tongue appears slick and smooth, while the edges are red and inflamed

______u. Tissue formed as part of healing process

______v. Localized collection of pus in tissue

______w. An open lesion

______x. Wound or injury

14. Inflammation
15. Abscess
16. Hypertrophy
17. Hyperplasia
18. Granulation tissue
19. Koplik's spots
20. Trauma
21. Ulcer
22. Geographic tongue
23. Pyogenic
24. Anthrax

2. Select from the list below factors influencing growth of microorganisms. Mark each correct answer with an "X."

______a. Time of day

______b. Food

______c. Temperature

______d. Oxygen

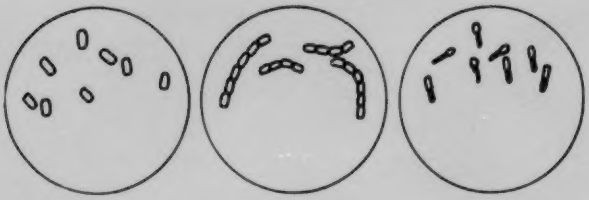
______e. Darkness

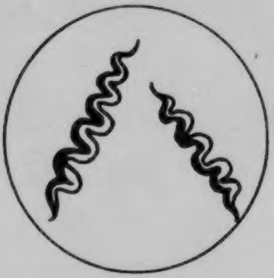
______f. Sun

______g. X-ray

______h. Moisture

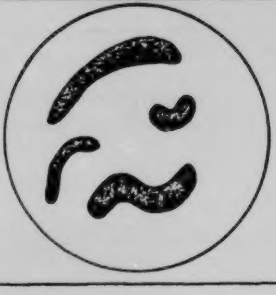
3. Identify forms of bacteria shown in the illustrations below by writing the correct names in the blanks provided.

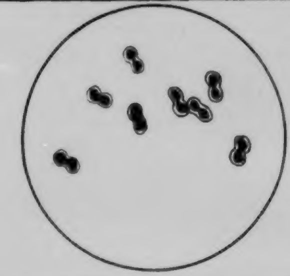




a. ______________________________

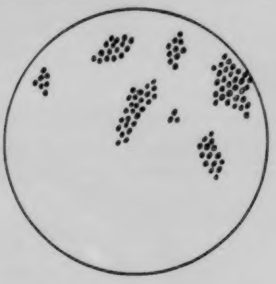
d. ______________________________

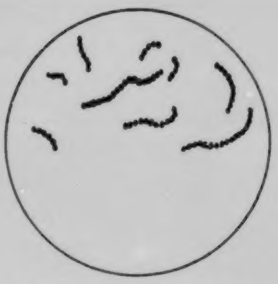




b. ______________________________

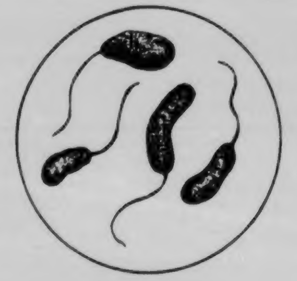
e. ______________________________





c. ______________________________

f. ______________________________



g. ______________________________

Streptococci
Spirochetes
Vibrios

Diplococci
Staphylococci

Bacilli
Spirilla

4. Select from the list below types of bacteria that produce tooth decay. Mark each correct answer with an "X."

_____a. Lactobacillus species

_____b. Yeast

_____c. Staphylococci

_____d. Molds

_____e. Ringworm

_____f. Streptococci

_____g. Filamentous rods (bacilli)

5. Describe plaque and its formation.

____

____

____

6. Arrange in order chain reaction of bacteria in the oral cavity. Place a "1" for the first step, a "2" for the second step, etc.

_____a. Acids begin decalcification of tooth enamel

_____b. Decay involves periapical (root) part of tooth

_____c. Breakdown of sugar by these bacteria produces acids

_____d. Bacteria react with sugars in mouth and multiply rapidly

_____e. Decaying process enters into dentin

_____f. Colonized bacterial plaque becomes attached to tooth surface

_____g. Further decay reaches pulp

7. State methods of controlling dental caries.

a. ____

b. ____

c. ____

d. ____

e. ____

8. Name examples of snack foods to aid in caries control.

   a. Drinks--____________________

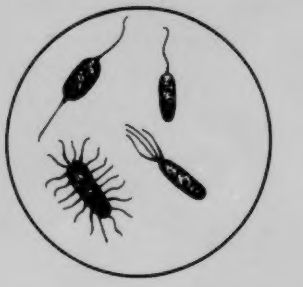
   b. Vegetables and fruit--____________________

   c. High protein--____________________

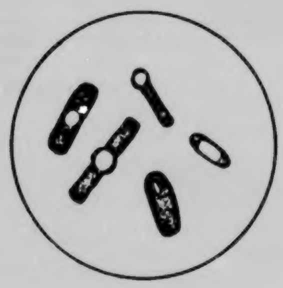
   d. Cereals and bread--____________________

9. Identify the specialized structures of bacteria shown below in the illustrations. Write the correct names of each structure in the blanks provided.

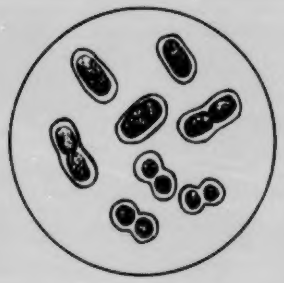
a. ____________________



b. ____________________



c. ____________________



Bacteria with capsules   Flagella   Spores

10. Select from the list below symptoms of an acute inflammation reaction. Mark each correct answer with an "X."

_____ a. Discoloration of tissue

_____ b. Swelling

_____ c. Pigmentation

_____ d. Pain

_____ e. Chills

_____ f. Redness

_____ g. Warmth

11. Name treatments for acute inflammation.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

12. Arrange in order stages of inflammation repair by placing a "1" for the first stage, a "2" for the second stage, and a "3" for the third stage.

_____ a. Foreign matter is engulfed by white cells in the bloodstream

_____ b. Enzymes or immune bodies are released

_____ c. Digestive bacteria, dead cells, or other debris are carried away by blood

13. Match diseases of the oral soft tissue to the correct definitions by placing the correct numbers in the blanks provided.

_____ a. One or more viruses which cause recurrent sores on the lips

_____ b. Inflammation that spreads through the substance of tissue and organs if not controlled

_____ c. Inflammatory process occurring in the gingival "flaps" of tissue found over partially erupted teeth

1. Gingivitis
2. Periodontitis (pyorrhea)
3. Pericoronitis

_____d. Inflammation of the gingival tissue

_____e. Oral infection caused by a fungus which appears as white or blue-white patches; varies in form from small dots to extensive plaques

_____f. Disease affecting mucosa, especially in oral cavity

_____g. Fissured condition of lips and angles of the mouth

_____h. Sequel of gingivitis in which inflammation has proceeded apically to involve the alveolar process

_____i. Inflammatory lesion associated with deep periodontal pockets

_____j. Disease characterized by recurring outbreaks of blister-like sores inside mouth and on tongue and lips

_____k. Painful inflammatory condition with necrosis (death of cell) of gingival tissue

4. Necrotizing ulcerative gingivitis (Vincent's infection or trench mouth)
5. Pyogenic granuloma (pregnancy tumor)
6. Leukoplakia
7. Cellulitis
8. Aphthous ulcer
9. Moniliasis (thrush)
10. Herpes simplex (fever blister or cold sore)
11. Cheilosis

14. Distinguish between primary malignant tumors of the oral cavity by placing an "S" for squamous cell carcinoma and an "A" for adenocarcinoma.

_____a. Starts with superficial ulcer or thickening of area

_____b. Arises from submucous glands, appearing as a lump beneath the mucosa

15. Match secondary oral disorders to the correct definitions by placing the correct numbers in the blanks provided.

_____a. Disorder characterized by one or more of the following: recurring impairment or loss of consciousness, psychic or sensory disturbance

_____b. Severe deficiency of hemoglobin in blood

_____c. Contagious disease caused by a virus, marked by spots and lesions of oral cavity in early stages

_____d. Acute infectious disease caused by toxins produced in the body, with tonic spasm of masseter muscles

_____e. Disease of the blood-forming organs

1. Measles
2. Mumps
3. Tetanus (lockjaw)
4. Diabetes mellitus
5. Pernicious anemia
6. Leukemia
7. Epilepsy

_____f. Metabolic disorder caused by lack of insulin; marked by excessive quantity of urine

_____g. Contagious disease caused by virus, marked by inflammation and swelling of parotid gland

16. Record microscopic findings.

17. Demonstrate the ability to:

    a. Remove plaque sample and mount slide.

    b. Assist in incision draining of apical abscess.

(NOTE: If activities 16 and 17 have not been completed prior to the test, ask your instructor when they should be accomplished.)

BACTERIOLOGY, DENTAL CARIES, AND ORAL PATHOLOGY
UNIT II

ANSWERS TO TEST

1. a. 11
   b. 6
   c. 13
   d. 3
   e. 8
   f. 2
   g. 10
   h. 4
   i. 1
   j. 5
   k. 9
   l. 12
   m. 7
   n. 17
   o. 24
   p. 19
   q. 23
   r. 14
   s. 16
   t. 22
   u. 18
   v. 15
   w. 21
   x. 20
2. b, c, d, e, h
3. a. Bacilli
   b. Spirilla
   c. Staphylococci
   d. Spirochete
   e. Diplococci
   f. Streptococci
   g. Vibrios
4. a, c, f, g
5. Description should include:
   a. Bacterial plaque which adheres to teeth is of streptococcus species
   b. Rapid growing streptococcus begins to attach to teeth
   c. Film of saliva mucin covers the mouth even after cleaning and polishing
   d. Streptococcus grows in mucinous deposits to form early stages of plaque

6. a. 4
   b. 7
   c. 3
   d. 1
   e. 5
   f. 2
   g. 6

7. a. Cleaning teeth immediately after eating
   b. Reducing frequency of intake of carbohydrates
   c. Fluoridating water supplies
   d. Applying topical fluorides by approved techniques
   e. Restoring carious lesions early

8. Answer should include:
   a. Drinks--grape juice, milk, sugar-free soda, tea with sugar substitute, vegetable juice, grapefruit juice, beef broth, chicken broth
   b. Vegetables and fruit--Cherry tomatoes, cucumbers, green peppers, celery, carrots, peaches, apples, grapes
   c. High protein--tuna, turkey, nuts, boiled eggs, chicken, cheese, cheese dips, all kinds of spread
   d. Cereals and bread--tacos, pretzels, popcorn, corn chips, bread sticks, wheat toast, rye toast

9. a. Flagella
   b. Spores
   c. Bacteria with capsules

10. b, d, f, g

11. a. Rest
    b. Applications of heat or cold
    c. Open drainage
    d. Specific drugs
    e. Natural defenses

12. a. 2
    b. 1
    c. 3

13. a. 10
    b. 7
    c. 3
    d. 1
    e. 9
    f. 6
    g. 11
    h. 2
    i. 5
    j. 8
    k. 4

14. a. s
    b. a

15. a. 7
    b. 5
    c. 1
    d. 3
    e. 6
    f. 4
    g. 2

16. Evaluated to satisfaction of instructor

17. Performance skills evaluated to satisfaction of instructor

APPLIED DRUGS
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to handle drug forms safely, legally, and appropriately in the dental office. This knowledge will be evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with applied drugs to the correct definitions.
2. Match drugs used in dentistry to the correct classifications.
3. Match methods of administering drugs to the correct descriptions.
4. Distinguish between characteristics of brand name drugs and generic drugs.
5. Match terms associated with drugs and their effects to the correct descriptions.
6. Select from a list the role of the dental assistant and drugs.
7. Complete a chart of drugs and their effects when abused.
8. Distinguish between epinephrine and atropine sulfate.
9. Select from a list factors affecting storage of drugs and materials in the dental office.
10. Match terms associated with a prescription to the correct descriptions.
11. Match frequently used Latin abbreviations to their meanings.
12. Match prefixes in metric system to the correct measurements.
13. Name the symbols of the metric system when given the units.
14. Name the metric table of liquid volume.
15. Name the symbols of the apothecaries' system when given the unit.
16. Select from a list rules of notation using metrics.
17. Write a prescription for doctor's signature.
18. Use the *Physicians' Desk Reference*.

19. Check the drugs and supplies in an emergency kit.

20. Convert customary quantity to metric quantity.

21. Demonstrate the ability to:

    a. Prepare a syringe for injection from a vial and an ampule.

    b. Prepare a cartridge syringe.

    c. Use a syringe.

APPLIED DRUGS
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide student with objective sheet.

  B. Provide student with information, assignment and job sheets.

  C. Order film.

  D. Make transparencies.

  E. Discuss unit and specific objectives.

  F. Discuss information, assignment and job sheets.

  G. Have students make posters depicting a variety of drugs used in the dental office.

  H. Make additional copies of blank prescription forms for student practice with Assignment Sheet #1.

  Examples: Analgesics, antibiotics, antihistamines

  I. Invite a resource person to speak with the class on the dangerous drugs used in the dental office.

  Examples: Pharmacist, dentist

  J. Demonstrate putting medication into paper cup and pouring into patient's hand, without touching medication.

  K. Lead a discussion on drugs commonly bought in quantity and transferred to colored bottles.

  L. Prepare an emergency kit, leaving out part of the drugs and supplies listed on Assignment Sheet #3. Repeat this assignment sheet again in oral surgery or as needed.

  M. Explain the importance of an emergency kit.

  Example: Emergencies sometimes mean life or death

  N. Have students go to the drugstore and ask for package inserts out of drug boxes to obtain information such as compounds, precautions, and possible side effects. Lead a discussion on findings.

  Examples: Codeine, iodine, penicillin, aspirin

O. Discuss drug classifications *I through V, explaining that Class I* drugs have high potential for abuse and Class V drugs are sold over the counter. Discuss which types of drugs are likely to be found in the dental office.

P. Provide students with equipment to be used in assignment and job sheets.

Q. Demonstrate and discuss procedures outlined in job sheets.

R. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters

1. TM 1--Transferring Tablets
2. TM 2--Preparation of Medication
3. TM 3--Medicine Glass
4. TM 4--The Meniscus
5. TM 5--Components of a Syringe
6. TM 6--Types of Syringes
7. TM 7--Syringe Parts To Be Kept Sterile
8. TM 8--Metric Units
9. TM 9--Quantity, Unit, Symbol, and Use of Metrics for Dental Assistants
10. TM 10--Prescription Form

D. Assignment sheets

1. Assignment Sheet #1--Write a Prescription for Doctor's Signature
2. Assignment Sheet #2--Use *Physicians' Desk Reference*
3. Assignment Sheet #3--Check Drugs and Supplies in an Emergency Kit
4. Assignment Sheet #4--Convert Customary Quantity To Metric Quantity

E. Answers to assignment sheets

F. Job sheets

1. Job Sheet #1--Prepare a Syringe for Injection from a Vial and an Ampule

2. *Job Sheet #2--Prepare a Cartridge Syringe*

3. Job Sheet #3--Use a Syringe

G. Test

H. Answers to test

III. Unit references:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W. B. Saunders Co., 1976.

B. Rogers, Helen. *Nursing I.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1970.

C. *Metrics for Dental Assistants.* The Center for Vocational Education. The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

IV. Films:

A. "Drugs: Facts Everyone Should Know." Oklahoma State Department of Health, N.E. 10th and Stonewall, Oklahoma City, Oklahoma 73152.

(NOTE: This 29-minute color film carries no rental fee. The user need only pay postage.)

B. "Dead Is Dead." Available from Paramount Communications, 5451 Marathon St., Hollywood, CA 90038.

(NOTE: This film is available on a free-loan basis only to Oklahoma teachers from Oklahoma State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1515 W. 6th Ave., Stillwater, OK 74074. Out-of-state teachers must order from the above address.)

APPLIED DRUGS
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Drug--Chemical agent that affects living tissues; given to patients to treat or prevent disease

B. Dose--Amount of drug that is given

C. Allergy--Unusual sensitivity to a drug, resulting in a tissue response

Example: Rash

D. Ampule--Small glass cartridge that is sealed to preserve contents in a sterile condition

E. Cartridge--Glass container that contains a local anesthetic solution

F. Tablet--Pulverized drug compressed into form by specially designed machinery

G. Contraindication--Condition that forbids use of a particular treatment

H. Corticosteroids--Used to suppress inflammation

I. Prescription--Written directive for dispensing and administering drugs

(NOTE: Over-the-counter items do not carry such a legend and can be bought without a prescription.)

J. Capsule--Small, cylinder-shaped container of gelatin filled with powder or granules; small, soluble container for medicine

K. Tincture--Diluted alcoholic extract of drug

(NOTE: Usually the strength of a tincture varies from 10 to 20 percent.)

L. Elixir--Palatable preparation of drugs dissolved in a mixture of alcohol, sugar, and an aromatic

II. Classification of drugs in dentistry

(NOTE: Drugs are classified in many ways. In this unit they will be classified according to use.)

INFORMATION SHEET

A. Analgesics--Relieve pain without loss of consciousness

Examples:	Mild-aspirin, aspirin substitute, strong (narcotic)-Codeine sulfate, morphine

(CAUTION: When giving a patient medication order by the dentist, always pour tablets into paper cup. Check medication again to be sure you have the correct medication and dosage.)

B. Antibiotics--Treat or prevent infection

(NOTE: They are effective because they inhibit the growth of or destroy disease-causing microorganisms.)

Examples:	Penicillin, tetracycline, erythromycin

C. Antihistamines--Used in treatment of allergy to counteract effects of systemic irritants

Example:	Epinephrine

D. Autonomic agents--Excite, stimulate or inhibit parts of the nervous system

Examples:	Inhibitor-atropine; stimulant-epinephrine

E. Flavoring agents--Give flavor to toothpaste, mouthwashes, rinsing solutions

Examples:	Peppermint oil, cinnamon oil, eugenol

F. Fluorides--Reduce rate of caries formation through incorporation in tooth enamel

Examples:	Stannous fluoride, sodium fluoride

G. General anesthetics--Used to abolish pain through loss of consciousness

H. Local anesthetics--Block passage of nerve impulses without loss of consciousness

I. Hemostatics--Used to stop and prevent bleeding

J. Local anti-infectives--Kill or suppress growth of microorganisms when applied to mucous membranes or skin

Examples:	Disinfectants or germicides kill pathogenic microorganisms; antiseptics suppress growth of microorganisms

INFORMATION SHEET

K. Sedatives--Lessen nervousness and apprehension before dental appointment

Examples: Phenobarbitol

L. Tranquilizers--Used for treatment of apprehension, anxiety, and tension

III. Methods of administering drugs (Transparencies 1-7)

A. Orally (p.o.)--Mouth

B. Intravenously (I.V.)--Vein

C. Intramuscularly (I.M.)--Injection into muscle

D. Subcutaneously (sub.q)--Injection under skin

E. Topically (top.)--Application to surface

Examples: Mucosa, skin

F. Sublingually (Subl.)--Placement under tongue

G. Infiltration--Injection in area of organ to be reached

H. Inhalation (inhal.)--Breathing of gaseous substance

Example: Nitrous oxide

IV. Characteristics of brand name drugs and generic drugs (Assignment Sheet #2)

A. Brand names (proprietary)

1. Controlled by business firms with registered trademarks

2. Are always capitalized

B. Generic (common)

1. Unprotected names that any business firm may use

2. Are not capitalized

V. Terms associated with drugs and their effects

A. Hypersensitivity--Considered an allergic reaction if previously exposed to an agent

INFORMATION SHEET

B. Intolerance--Exaggerated degree of usual effect of a medication produced by an unusually small dose

Example: Marked sedation from a small dose of barbiturate

C. Acquired drug tolerance--Ability to endure usual effects of a drug, usually from repeated use

D. Side effect--Unavoidable effects which occur at usual dosage level of drug

Example: Constipation following use of codeine

E. Drug dependence--Psychological desire to repeat use of drugs because of emotional reasons

F. Overdose--Excessive amount of drug present in the body

G. Toxic dose--Overdose that causes poisoning

H. Lethal dose--Overdose causing death

I. Anaphylaxis--Sudden reaction to drug resulting in shock or death

VI. Role of the dental assistant and drugs

(NOTE: Drugs have an effect on the body and the mind. They are usually abused because of their potential mind-altering capabilities. The dental assistant needs to be aware that some people will try to obtain drugs illegally.)

A. Comply fully with Federal drug control regulations

B. Alert yourself to the possibility that someone may try to steal drugs from your office

C. Keep all drugs out of sight of patients

D. Lock all narcotics in the safe

E. Send written prescription if dentist calls narcotic prescription by telephone

(CAUTION: Never try to relay information concerning drugs; have patients or pharmacist speak directly to dentist.)

INFORMATION SHEET

VII. Drugs and their effects when abused

Drug	Pharmacologic Classification	How Taken When Abused	Possible Effects When Abused
Alcohol	Depressant	Orally	Widely varied, may appear to have a stimulant effect. Slurred speech, staggering, drowsiness, impaired judgment
Morphine	Central nervous system depressant	Orally or by injection	Drowsiness or stupor, pinpoint pupils
Heroin	Depressant	Sniffed or by injection	Same as morphine
Codeine	Depressant	Orally, usually as cough syrup	Drowsiness, pinpoint pupils
Methadone	Depressant	Orally or by injection	Same as morphine
Cocaine	Central nervous system stimulant	Sniffed or by injection	Extreme excitation, tremors, hallucinations
Marijuana	Hallucinogen	Smoked or orally	Drowsiness or excitability, dilated pupils, talkativeness, laughter, hallucinations
Barbiturates	Depressant	Orally or by injection	Drowsiness, staggering, slurred speech
Amphetamine drugs	Stimulant	Orally or by injection	Excitation, dilated pupils, tremors, talkativeness, laughter, hallucinations
LSD	Hallucinogen	Orally or by injection	Excitation, hallucinations, rambling speech
Glue	Depressant	Inhaled	Staggering, drowsiness, slurred speech, stupor

INFORMATION SHEET

VIII. Epinephrine and atropine sulfate

A. Epinephrine--Vasoconstrictor which causes pronounced contraction of the arterioles

(NOTE: Epinephrine is added in small quantities to local anesthetic solutions to increase their duration and reduce bleeding. It is also used in larger doses as a treatment for severe allergic reaction.)

B. Atropine sulphate--Checks the secretion of saliva so that the mouth and throat become dry

(NOTE: It is given by mouth every two hours before dental procedures and is also sometimes given IM with morphine or meperidine prior to general anesthesia.)

IX. Factors affecting storage of drugs and materials (Assignment Sheet #3)

(NOTE: For best results, follow manufacturer's instructions for storing drugs and materials.)

A. Exposure to air

B. Change in temperature

(NOTE: Some drugs need to be refrigerated.)

C. Exposure to light

D. Expiration date

X. Terms associated with a prescription (Transparency 10, Assignment Sheet #1)

(NOTE: If any drugs are given from your office, they must be recorded on patient's chart, and the bottle must be labeled with directions for use of drug.)

A. Superscription--Rx symbol meaning "take thou"

B. Inscription--Body of prescription containing name of drug, dosage, form and strength

(NOTE: The prescribed drug may be designated by its generic name or brand name. If the generic name is used, it gives the pharmacist a choice of brand names carried in stock.)

C. Subscription--Direction to pharmacist as to quantities to be dispensed

D. Signa--Instructions to patient for use of prescription

E. D.E.A. number--Required if a narcotic is prescribed

(NOTE: This is a number assigned to the dentist by the Drug Enforcement Administration.)

INFORMATION SHEET

F. Signature of writer--Dentist must sign all prescriptions

G. Number of times--Designates number of times may be refilled

XI. Frequently used Latin abbreviations and their meanings

A. a.a.--Of each

B. a.c.--Before meals

C. ad--To, up to

D. b.i.d.--Twice daily

E. non rep.--Not to be repeated

F. p.c.--After meals

G. p.r.n.--When needed

H. t.i.d.--Three times a day

I. Sig. or S--Label

J. Rx--Take thou

K. q.i.d.--Four times daily

L. q.--Every

M. q.4h--Every four hours

N. p.o.--By mouth

O. gtt--Drop

P. Elix.--Elixir

O. h.s.--Hour of sleep or bedtime

XII. Prefixes in metric system

A. Micro--One-millionth (0.000001)

B. Milli--One-thousandth (0.001)

C. Centi--One-hundredth (0.01)

D. Deci--One-tenth (0.1)

E. Unit--One (1.0)

F. Deka or deca--Ten (10.0)

INFORMATION SHEET

G. Hecto--One hundred (100.0)

H. Kilo--One thousand (1000.0)

XIII. Units and symbols of the metric system (Transparency 9)

A. Gram--g

B. Cubic centimeter--cc

C. Liter--L

D. Milligram--mg

E. Microgram--mcg

F. Kilogram--kg

XIV. Metric table of liquid volume (Transparency 8) (Assignment Sheet #4)

(NOTE: ml and cc are interchangeable.)

A. 1,000 milliliters (mL) = 1 Liter

B. 1,000 cubic centimeters (cc) = 1 Liter

XV. Units and symbols of the apothecaries' system

A. Grain--gr

B. Dram--dr or ʒ

C. Ounce--oz or ℥

D. Minim--m

E. Pint--pt

F. Quart--qt

G. Gallon--gal

XVI. Rules of notation using metrics (Transparency 9)

A. Symbols are not capitalized unless the unit is a proper name

Example: mm, not MM

B. Symbols are not followed by periods

Example: m not m.

INFORMATION SHEET

C. Symbols are not followed by an "s" for plurals

Example: 25 g not 25 gs

D. A space separates the numerals from the unit symbols

Example: 41 mm not 41mm

E. Spaces, not commas, are used to separate large numbers into groups of three digits

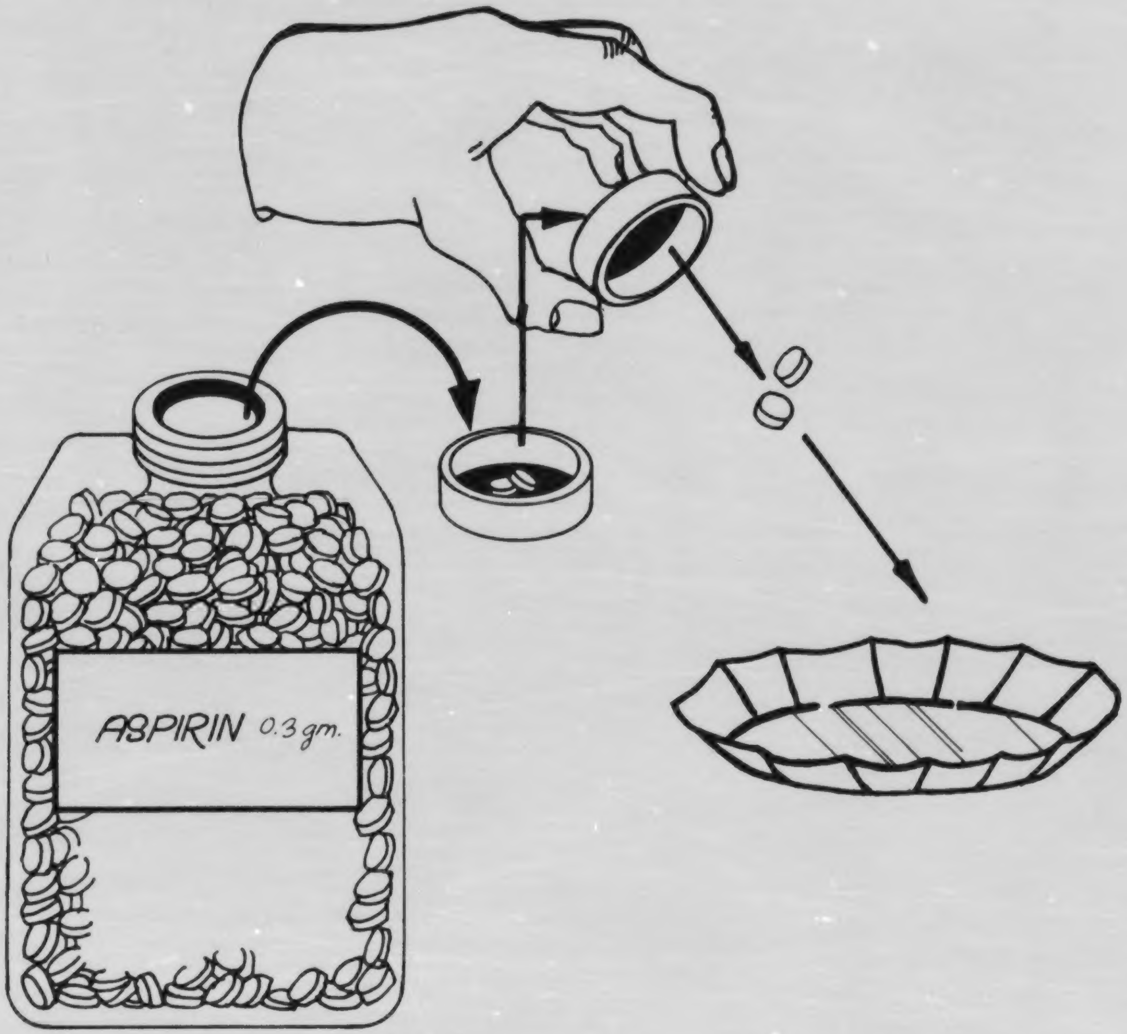
Example: 45 271 km not 45,271 km

F. A zero precedes the decimal point if the number is less than one

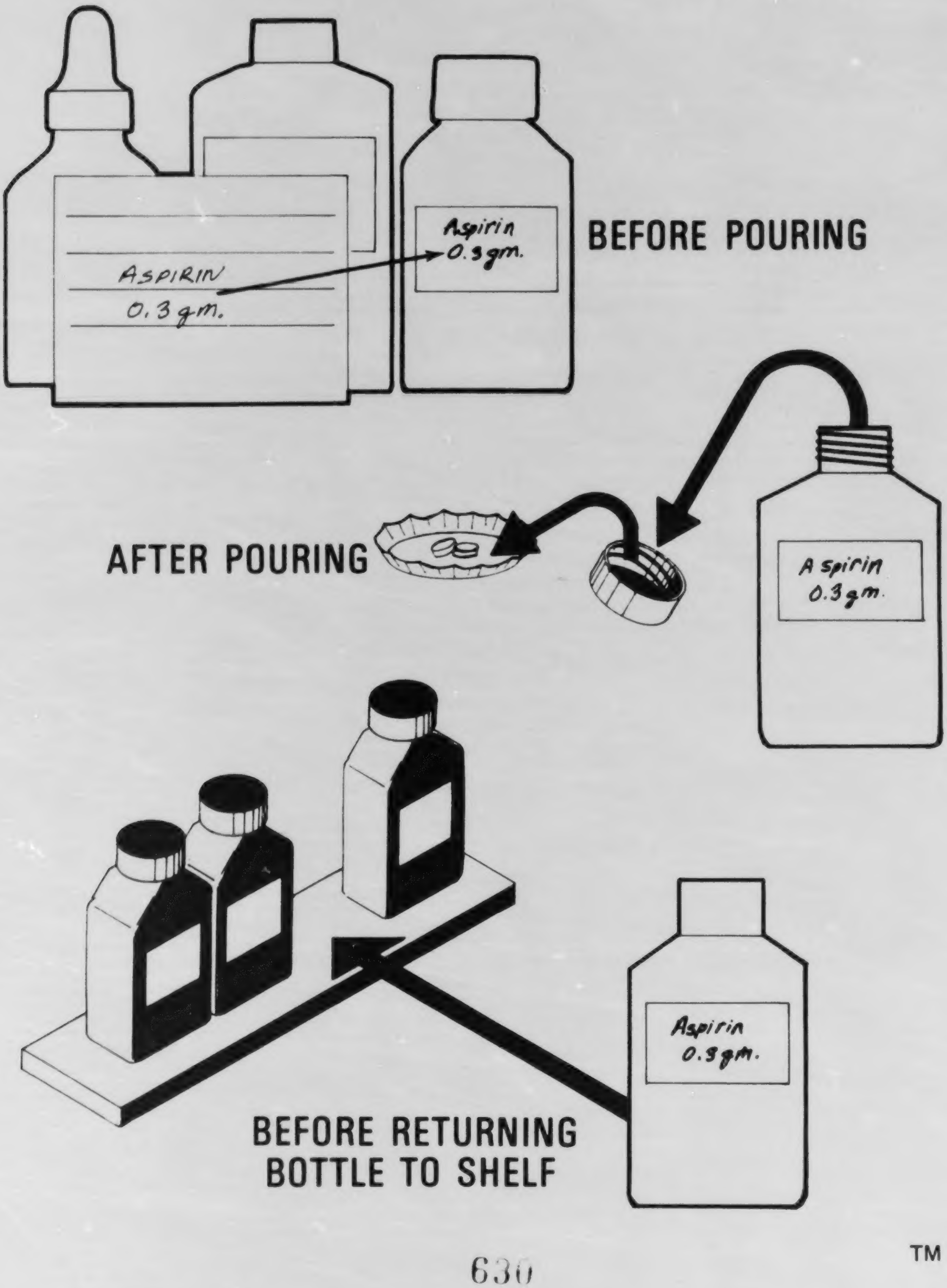
Example: 0.52 g not .52 g

G. Litre and metre can be spelled with an "re" or "er" ending

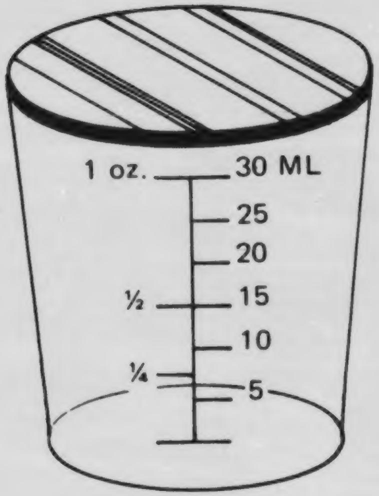
Transferring Tablets


ASPIRIN 0.3 gm.

Preparation Of Medication


ASPIRIN
0.3 gm.
Aspirin
0.3 gm.
BEFORE POURING
AFTER POURING
Aspirin
0.3 gm.
Aspirin
0.3 gm.
BEFORE RETURNING
BOTTLE TO SHELF

Medicine Glass


1 oz.
30 ML
25
20
½
15
10
¼
5

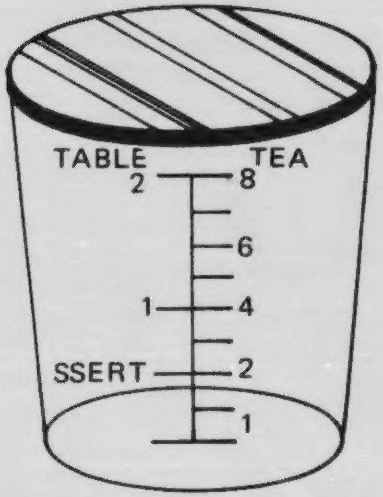
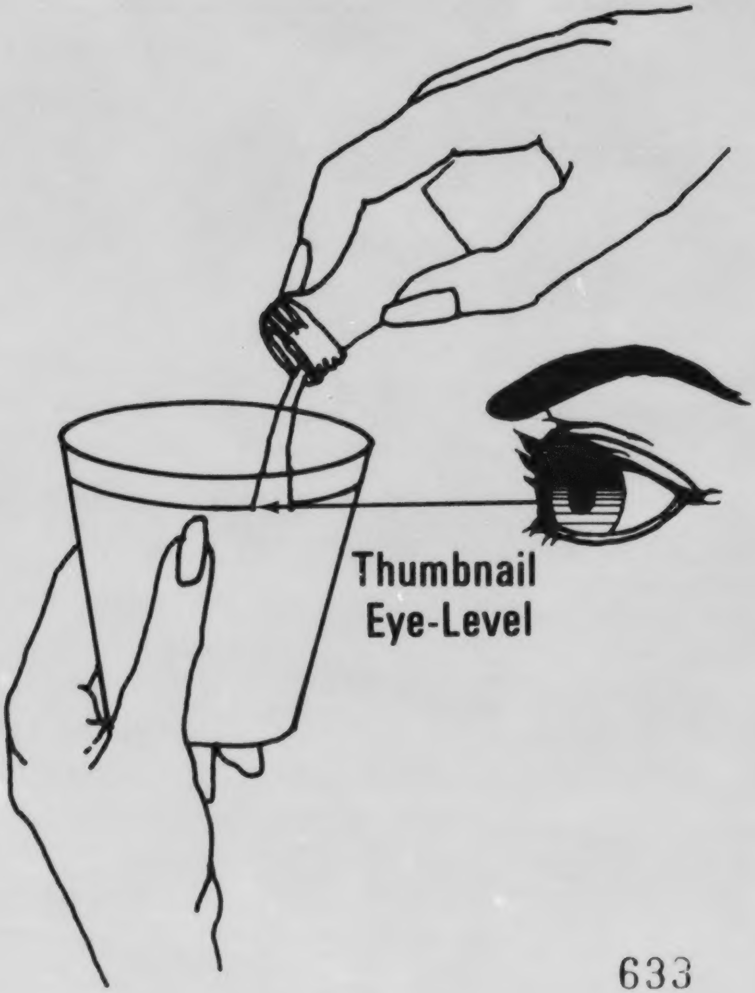


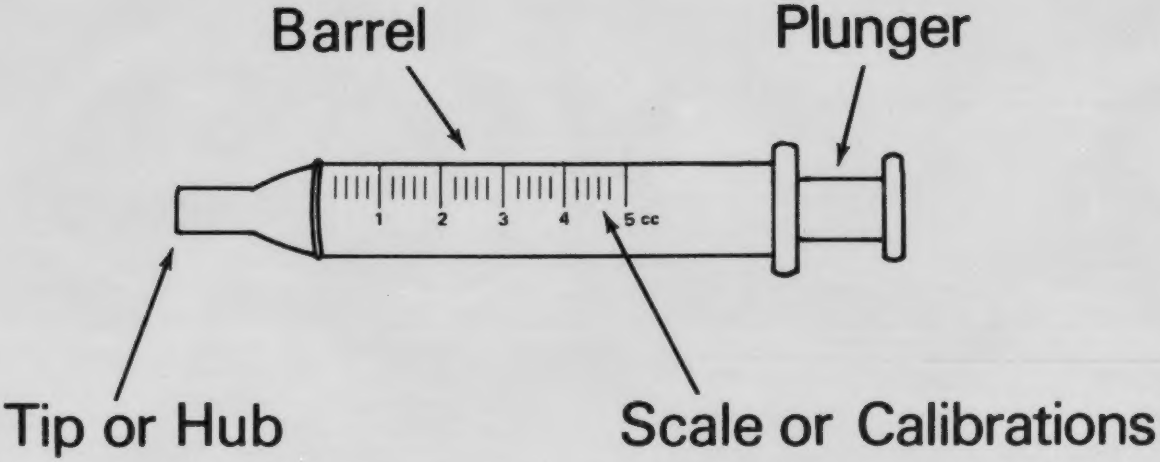
TABLE
2
TEA
8
6
1
4
SSERT
2
1

The Meniscus

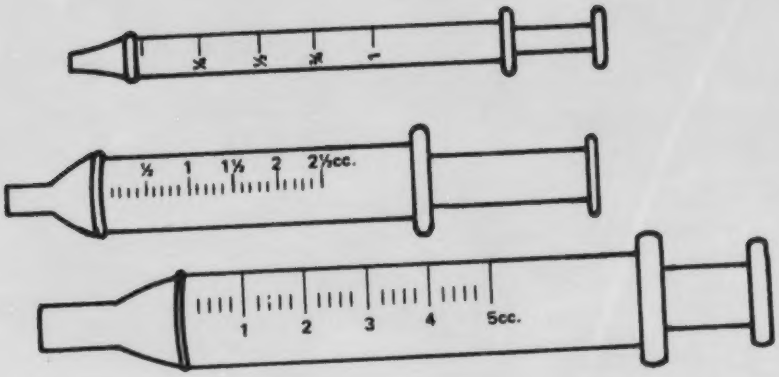

Thumbnail
Eye-Level

TM 4

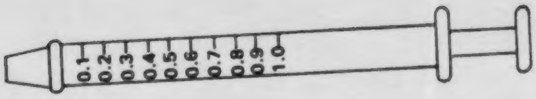
Components of a Syringe


Barrel
Plunger
1
2
3
4
5 cc
Tip or Hub
Scale or Calibrations

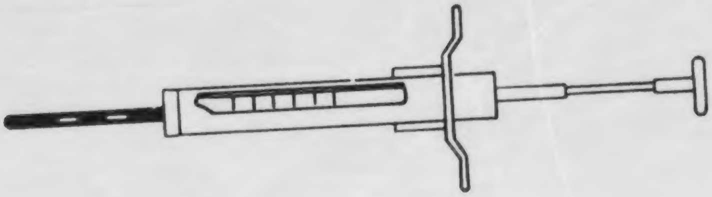
Types of Syringes


¼
½
¾
1
½
1
1½
2
2½cc.
1
2
3
4
5cc.

Standard

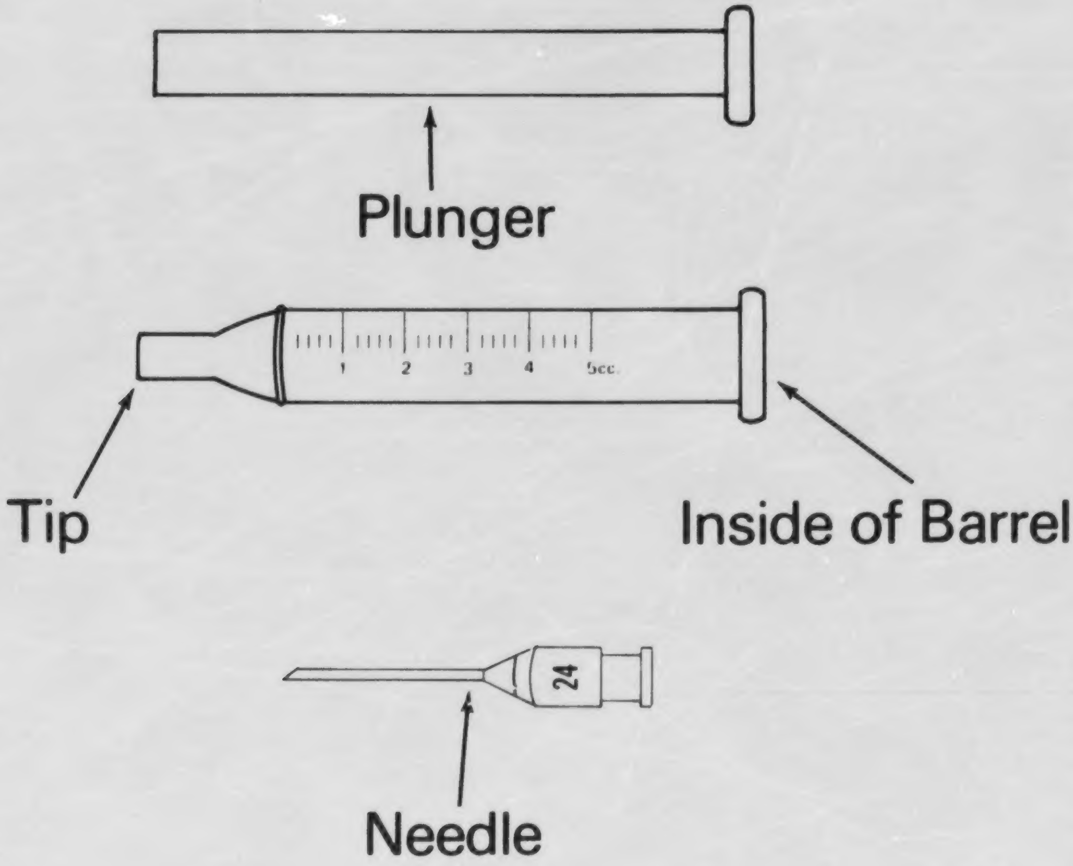

0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0

Tuberculin



Cartridge

Syringe Parts To Be Kept Sterile


Plunger
1
2
3
4
5cc.
Tip
Inside of Barrel
24
Needle

Metric Units

DRY WEIGHT ..

- Kilogram
- Milligram
- Gram

LIQUID VOLUME ..

- Liter
- Milliliter

TM 8

Quantity, Unit, Symbol, and Use of Metrics for Dental Assistants

Quantity	Unit	Symbol	Use
Length	millimeter	mm	X-ray slide; rubber dam; drill appliance; packing materials; length/diameter of molar root
	centimeter	cm	Sutures; dental tape and carbon
Area	square millimeter	mm^2	X-ray slide; surgical preparation
Fluid flows	millimeter per minute	ml/min	Oxygen and gas intakes; developing tank
Mass	milligram	mg	Pharmaceutical measurement; impression and base materials; crown cap material, i.e.,gold
	garm	g	
	kilogram	kg	
Volume and capacity	cubic centimetre	$(cc.)cm^3$	Injections; plaster; liquid application, i.e., topical fluoride; aseptics; impression materials, i.e., alginate; dental equipment
	milliliter	ml	
	liter	l	
Temperature	drgree celsius	°C	X-ray development soluyion; room temperature
Pressure	kilopascal	kPa	Sterilizer; oral aspirator

Prescription Form

Doctor's Name
Address

Telephone 377-2000

Reg. No. ____________

Name ____________________

Age ____________

Address ____________________

Date ____________

Label

Refill ______ times

Signature ____________________

DA - 37-E

APPLIED DRUGS
UNIT I

ASSIGNMENT SHEET #1–WRITE A PRESCRIPTION FOR DOCTOR'S SIGNATURE

NAME ______________________________ SCORE ____________

Your doctor may ask you to write certain prescriptions to save him or her time. You should never sacrifice speed for accuracy. Always check your prescription for errors.

(CAUTION: Prescription pads should always be kept in a controlled or locked area.)

Fill in the following prescription for your doctor to sign:

Joyce Cole, Age 28
310 North Duncan, Stillwater
9/12/79
Erythromycin 250 mg. #8
1 tablet twice daily
Refill 0

Charles S. Ogle, D.D.S.
718 King Road
Anytown, America 74074

Telephone 377-2000 Reg. No. ____________

Name ______________________ Age ____________

Address ____________________ Date ____________

Label

Refill ____ times Signature ____________________

(NOTE: Make sure doctor's registration number with the Drug Enforcement Administration is shown on the form. Older forms will show this as BNDD number.)

ASSIGNMENT SHEET #1

Fill in additional prescriptions as dictated to you by your instructor.

Katherine A. Smith, D.D.S.
718 King Road
Anytown, American 74074

Telephone 377-2000 Reg. No.________________

Name______________________________ Age________________

Address____________________________ Date________________

Label

Refill______times ______ Signature__________________________

Katharine A. Smith, D.D.S.
718 King Road
Anytown, America 74074

Telephone 377-2000 Reg. No.________________

Name______________________________ Age________________

Address____________________________ Date________________

Label

Refill______times______ Signature__________________________

APPLIED DRUGS
UNIT I

ASSIGNMENT SHEET #2--USE PHYSICIANS' DESK REFERENCE

NAME____________________________________ SCORE____________

There are many drugs used in the dental office - to relieve anxiety, treat infection, and assist in surgical procedures. Because of this, it is important that you be familiar with a wide variety of drugs and their uses. The *Physicians' Desk Reference* (P.D.R.) contains a drug identification section along with brand name and generic name indexes. Look up the drugs listed below and any others your instructor may give you and fill in the chart on the next page.

Tranquilizer

Antibiotic

Anticoagulant

Analgesic

Barbiturate

Antihistamine

Antipyretic

Hemostatic

ASSIGNMENT SHEET #2

Drug	Indication	Contraindication	Strength Available	Weight	Color

APPLIED DRUGS
UNIT I

ASSIGNMENT SHEET #3--CHECK DRUGS AND SUPPLIES IN AN EMERGENCY KIT

NAME____________________________________ SCORE____________

An emergency kit should be kept in each dental office for situations where emergency care must be given. This kit is checked weekly by the dental office assistant to make sure all needed items are there for use. Also, medications and solutions must be checked to see if their expiration date for use has passed.

Contact a local dentist, oral surgeon, or other dental specialist and ask if you may check the items and drugs in their emergency kit. Then fill in the chart below and on the next page. The dental office assistant will be able to give you information on the equipment in the emergency kit. Then use the *Physicians' Desk Reference* to look up information needed on drugs and solutions found in the kit.

(CAUTION: There will not be time to look for supplies during an emergency. An emergency kit must always be up-to-date and ready for use.)

EQUIPMENT	NUMBER	SIZE	USE

ASSIGNMENT SHEET #3

DRUGS AND SOLUTIONS	NUMBER	ROUTE OF ADMINISTRATION	USE	SIDE EFFECTS	EXPIRATION DATE

APPLIED DRUGS
UNIT I

ASSIGNMENT SHEET #4--CONVERT CUSTOMARY QUANTITY TO METRIC QUANTITY

NAME ______________________________ SCORE ____________

While working in a dental office, you will notice that some of the things you order or use are marked only in metric units. You will need to be familiar with the correct customary equivalents in order to communicate with patients and suppliers who use customary quantities. Use the tables on the next page to write the correct equivalents for the measurements shown below.

1. Using Table 1, convert the customary quantities to the metric quantities listed below.

CUSTOMARY QUANTITY	METRIC QUANTITY
4 qts. of antiseptic solution	a. ____________
1 tbs. dosage	b. ____________
4 fl. oz. of concentrate	c. ____________
1 pt. solution	d. ____________
2 fl. oz. mouthwash	e. ____________

2. Using Table 2, convert the following quantities listed below.

f. ____________ fl. oz. = 235mL

g. ____________ mL = 25 fl. oz.

h. ____________ fl. oz. = 950mL

i. ____________ mL = 16 fl. oz.

j. ____________ mL = 32 fl. oz.

k. ____________ mL = 1 teaspoon

ASSIGNMENT SHEET #4

TABLE 1

1 cm = 0.39 inch	1 inch = 2.54 cm
1 m = 3.28 feet	1 foot = 0.305 m
1 m = 1.09 yards	1 yard = 0.91 m
1 km = 0.62 mile	1 mile = 1.61 km
1 cm^2 = 0.16 sq in	1 sq in = 6.5 cm^2
1 m^2 = 10.8 sq in	1 sq ft = 0.09 m^2
1 m^2 = 1.2 sq yd	1 sq yd = 0.8 m^2
1 hectare = 2.5 acres	1 acre = 0.4 hectare
1 cm^3 = 0.06 cu in	1 cu in = 16.4 cm^3
1 m^3 = 35.3 cu ft	1 cu ft = 0.03 m^3
1 m^3 = 1.3 cu yd	1 cu yd = 0.8 m^3
1 mL = 0.2 tsp	1 tsp = 5 mL
1 mL = 0.07 tbsp	1 tbsp = 15 mL
1 L = 33.8 fl oz	1 fl oz = 29.6 mL
1 L = 4.2 cups	1 cup = 237 mL
1 L = 2.1 pts	1 pt = 0.47 L
1 L = 1.06 qt	1 qt = 0.95 L
1 L = 0.26 gal	1 gal = 3.79 L
1 gram = 0.035 oz	1 oz = 28.3 g
1 kg = 2.2 lb	1 lb = 0.45 kg
1 metric ton = 2205 lb	1 ton = 907.2 kg
1 kPa = 0.145 psi	1 psi = 6.895 kPa

ASSIGNMENT SHEET #4

TABLE II

MILLILITERS TO FLUID OUNCES (APPROXIMATE)

mL	fl.oz.	mL	fl.oz.	mL	fl.oz.
100	3.4	10	.3	1	.03
200	6.8	20	.7	2	.07
300	10.1	30	1.0	3	.10
400	13.4	40	1.4	4	.14
500	16.9	50	1.7	5	.17
600	20.3	60	2.0	6	.20
700	23.7	70	2.4	7	.24
800	27.1	80	2.7	8	.27
900	30.4	90	3.0	9	.30

5 mL(4.9 mL) = 1 teaspoon
15 mL(14.8 mL) = 1 tablespoon

FLUID OUNCES TO MILLILITERS (APPROXIMATE)

fl.oz.	mL	fl.oz.	mL	fl.oz.	mL
10	295.7	1	29.6	.1	3
20	591.5	2	59.2	.2	6
30	887.2	3	88.7	.3	9
40	1182.9	4	118.3	.4	12
50	1478.7	5	147.9	.5	15
60	1774.4	6	177.4	.6	18
70	2070.2	7	207.0	.7	21
80	2365.9	8	236.6	.8	24
90	2661.6	9	266.2	.9	27

1 teaspoon = 5 mL(4.9 mL)
1 tablespoon = 15 mL(14.8 mL)

APPLIED DRUGS
UNIT I

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #4

a. 3.8 Liters
b. 15 mL
c. 118.4 mL
d. 0.47 Litre (Liter)
e. 59.2 mL
f. 7.97 fl. oz.
g. 739.4 mL
h. 32.1 fl. oz.
i. 473.1 mL
j. 946.4 mL
k. 5 mL

APPLIED DRUGS
UNIT I

JOB SHEET #1--PREPARE A SYRINGE FOR INJECTION FROM A VIAL AND AN AMPULE

I. Equipment

   A. Medication order and chart

   B. Syringe and needle

   C. Vial or ampule of medication

   D. Cotton balls or sponges

   E. Disinfectant solution

   F. Tray for equipment

II. Procedure using a vial

   A. Check medication order

   B. Obtain medication

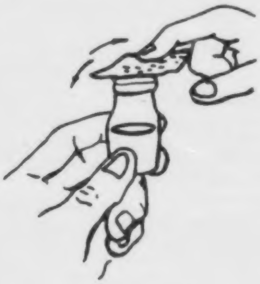
   C. Wash hands

   D. Assemble equipment

   E. Remove cover if necessary

   F. Clean rubber stopper with an alcohol sponge (Figure 1)

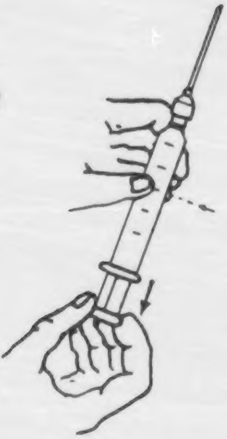
FIGURE 1



JOB SHEET #1

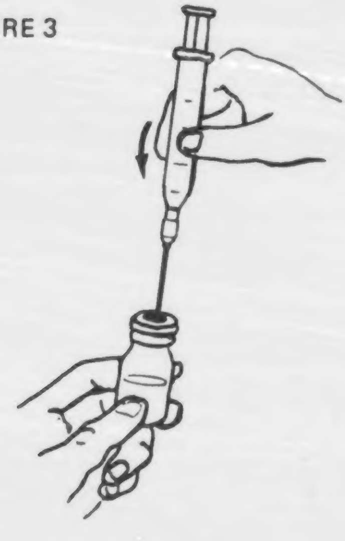
G. Draw air equal to desired dosage into syringe (Figure 2)

FIGURE 2



H. Insert needle into rubber stopper of vial (Figure 3)

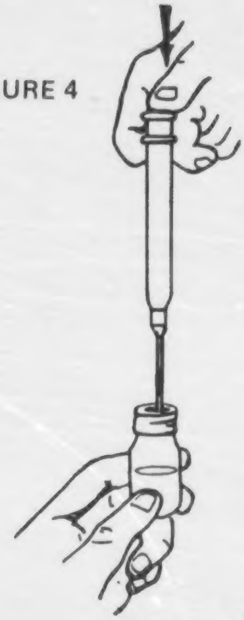
FIGURE 3



JOB SHEET #1

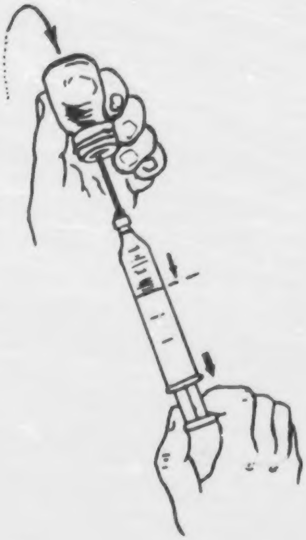
I. Push air from syringe into vial (Figure 4)

FIGURE 4



J. Invert vial and withdraw desired dosage (Figure 5)

FIGURE 5



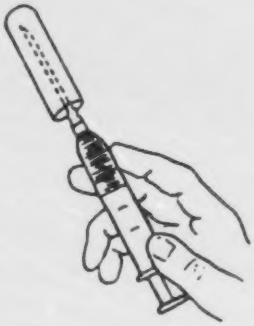
JOB SHEET #1

K. Withdraw needle from rubber stopper

L. Remove air bubble from syringe

M. Cover needle (Figure 6)

FIGURE 6



N. Place syringe on tray with medicine card and additional alcohol sponges

III. Procedure using an ampule

A. Check medication order and card

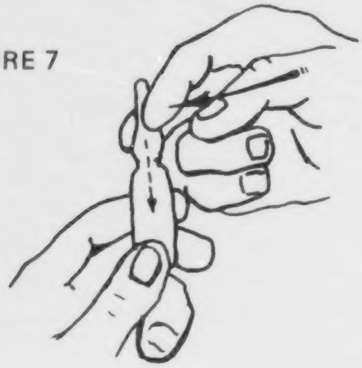
B. Obtain medication

C. Wash hands

D. Assemble equipment

E. Tap the top of the ampule to cause solution to collect in the body of the ampule (Figure 7)

FIGURE 7

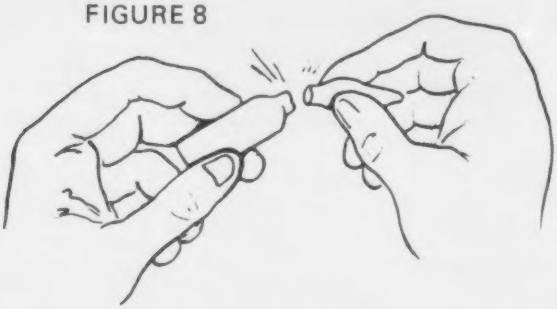


JOB SHEET #1

F. Break off top of ampule at area of constriction (Figure 8)

(NOTE: Some ampules may need to be filed at the breaking line; others are prescored. Protect fingers from cutting by holding ampule in an alcohol sponge or sterile 2 x 2.)

FIGURE 8

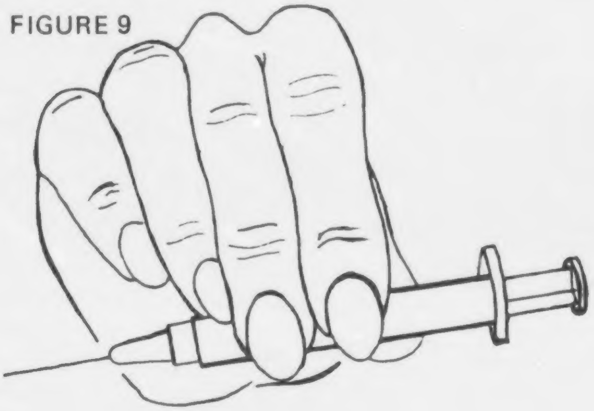


G. Withdraw solution from ampule without injecting air

(NOTE: If needle is not long enough to reach the bottom of the ampule, it may be necessary to hold ampule in horizontal position or to invert it to get the required dosage.)

H. Pass the loaded syringe to dentist in this position (Figure 9)

FIGURE 9



(CAUTION: Maintain sterile technique. Do not touch sides of plunger or any part of the needle.)

APPLIED DRUGS
UNIT I

JOB SHEET #2--PREPARE A CARTRIDGE SYRINGE

I. Equipment

   A. Dental chart

   B. Metal cartridge syringe

   C. Cartridge of medication

   D. Cotton balls or sponges

   E. Antiseptic solution

   F. Tray

II. Procedure

   A. Check medication order with cartridge

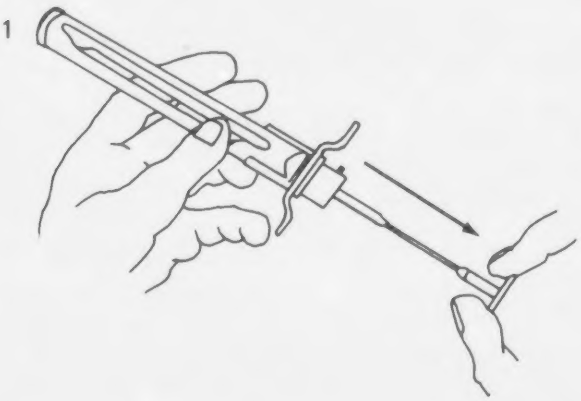
   B. Compute dosage if necessary

   C. Wash hands

   D. Assemble equipment

   E. Hold the barrel of the syringe and withdraw the plunger (Figure 1)

FIGURE 1



JOB SHEET #2

F. Pull plunger down until it is at a right angle to the barrel (Figure 2)

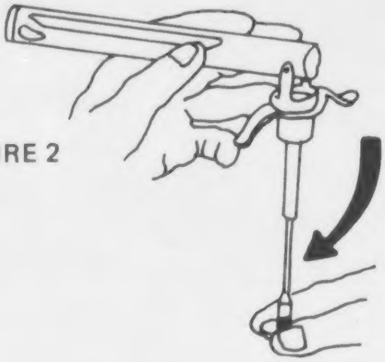


FIGURE 2

G. Insert sterile cartridge into barrel, needle end first (Figure 3)

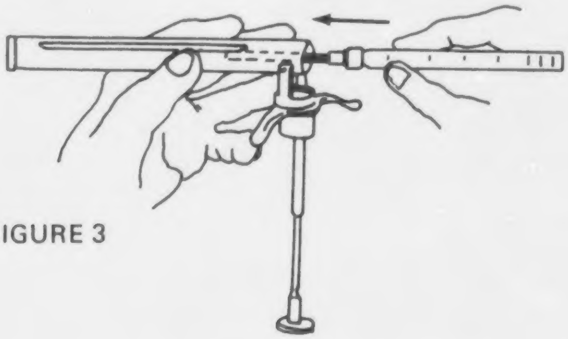


FIGURE 3

H. Turn cartridge in a clockwise direction until it is secured into the needle end of the barrel (Figure 4)

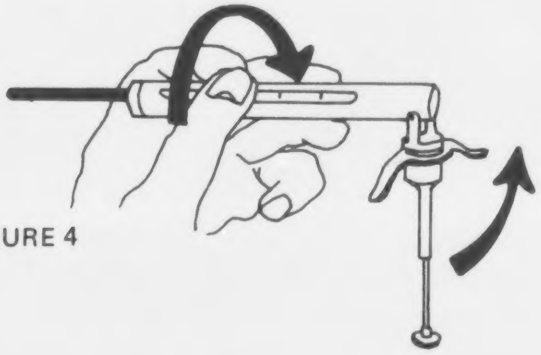


FIGURE 4

JOB SHEET #2

I. Swing plunger back into place and twist plunger onto threaded shaft of cartridge piston (Figure 5)

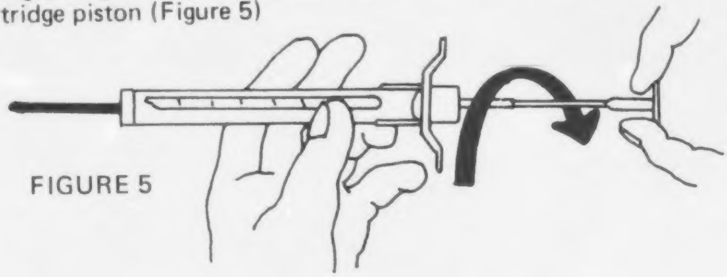


FIGURE 5

(CAUTION: Do not overtighten.)

J. Remove rubber sheath from needle just prior to injection (Figure 6)

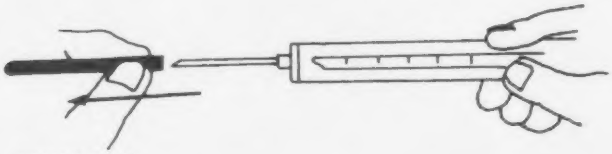


FIGURE 6

K. Pull back slightly on plunger to aspirate before injection

L. Replace sheath on needle immediately after administering injection

M. Disengage plunger by rotating counterclockwise

N. Pull plunger out and down at a right angle

O. Rotate cartridge counterclockwise to disengage at needle end of barrel

P. Remove cartridge from barrel

Q. Bend needle back and forth on hub until it snaps

R. Discard both cartridge and sheath-protected needle

S. Provide for patient's comfort

T. Replace equipment

U. Wash hands

APPLIED DRUGS
UNIT I

JOB SHEET #3--USE A SYRINGE

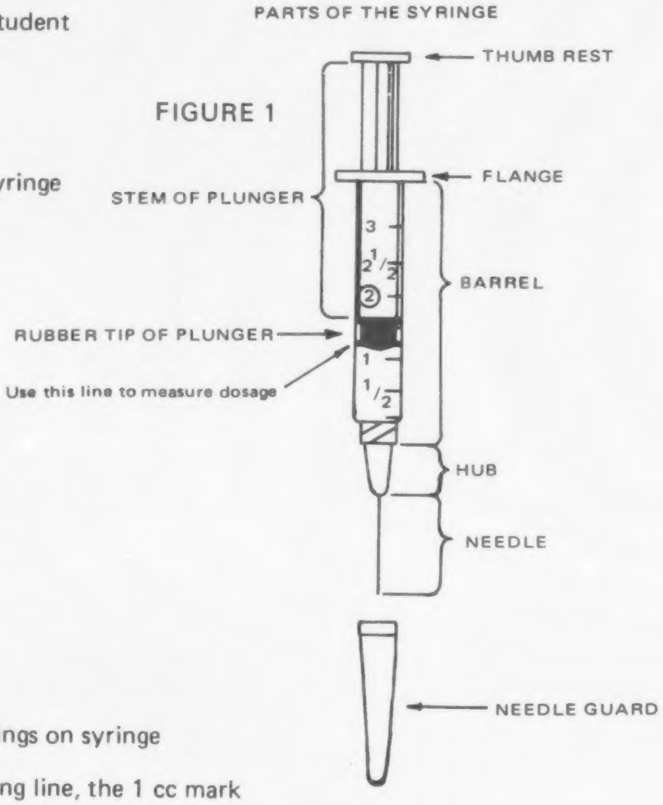
(CAUTION: This simulated procedure need not be performed using sterile technique. It should be emphasized, however, that absolute sterility of medication, needles, and syringe is necessary whenever an injection is given.)

I. Equipment

- A. Syringes, various sizes for comparison
- B. Syringe (2 1/2 or 3 cc size), one for each student to use
- C. Needle, one for each student
- D. Vials of solution

PARTS OF THE SYRINGE

FIGURE 1


THUMB REST
FLANGE
STEM OF PLUNGER
3
2 1/2
2
BARREL
RUBBER TIP OF PLUNGER
1
1/2
Use this line to measure dosage
HUB
NEEDLE
NEEDLE GUARD

II. Procedure

- A. Identify parts of the syringe (Figure 1)
    1. Stem of plunger
    2. Barrel
    3. Thumb rest
    4. Plunger
    5. Flange
    6. Hub
    7. Needle
    8. Needle guard
- B. Assemble syringe
- C. Observe scales or markings on syringe
    1. Locate the first long line, the 1 cc mark
    2. Count the short lines between the tip end of the barrel and the 1 cc mark. How much does each mark indicate?
- D. Pull plunger to mark indicating 1.4 cc; 1.5 cc; 0.6 cc; and 2 cc
- E. Compare the various sizes of syringes. Do the marks always indicate the same amount?

JOB SHEET #3

F. Place a needle on the syringe

G. Pull plunger back to 1.4 cc mark

H. Inject 1.4 cc of air into a vial

I. Invert vial and withdraw 1.4 cc of fluid

(NOTE: Introducing a volume of air equal to the volume of solution to be withdrawn increases the pressure within the vial, making withdrawal of an accurate amount easier.)

J. Expel any remaining air from syringe (Figure 2)

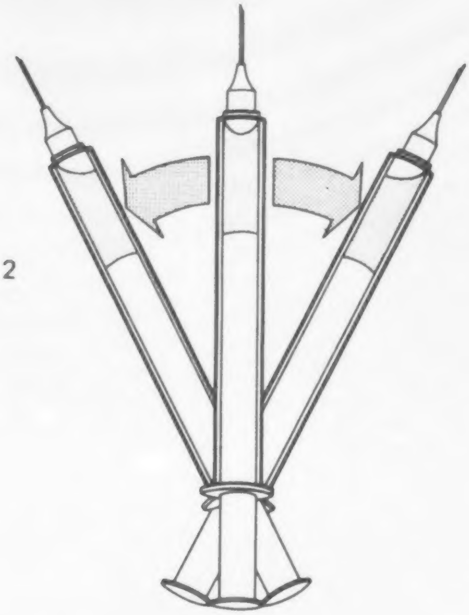


FIGURE 2

K. Discard solution

L. Draw up 1.6 cc of fluid

M. Dispose of used equipment as instructed after skill in using syringe is demonstrated to satisfaction of instructor

APPLIED DRUGS
UNIT I

TEST

NAME ______________________________ SCORE ________

1. Match terms associated with applied drugs with the correct definitions. Place the correct numbers in the blanks provided.

_____a. Pulverized drug compressed into form by specially designed machinery

_____b. Written directive for dispensing and administering drugs

_____c. Small, cylinder-shaped container of gelatin filled with powder or granules; small, soluble container for medicine

_____d. Amount of drug that is given

_____e. Palatable preparation of drugs dissolved in mixture of alcohol, sugar, and an aromatic

_____f. Small glass cartridge that is sealed to preserve its contents in sterile condition

_____g. Chemical agent that affects living tissues; given to patients to treat cr prevent disease

_____h. Diluted alcoholic extract of drug

_____i. Used to suppress inflammation

_____j. Unusual sensitivity to drug, resulting in tissue response

_____k. Condition that forbids use of particular treatment

_____l. Glass container that contains a local anesthetic solution

1. Drug
2. Dose
3. Allergy
4. Ampule
5. Cartridge
6. Tablet
7. Contraindication
8. Corticosteroids
9. Prescription
10. Capsule
11. Tincture
12. Elixir

2. Match drugs used in dentistry to their correct classifications. Write the correct numbers in the blanks provided.

______a. Lessen nervousness and apprehension before dental appointment

______b. Relieve pain without loss of consciousness

______c. Give flavor to toothpaste, mouthwashes, and rinsing solutions

______d. Used in treatment of allergy to counteract effects of systemic irritants

______e. Used for treatment of apprehension, anxiety and tension

______f. Treat or prevent infection

______g. Reduce rate of caries formation through incorporation in tooth enamel

______h. Used to stop and prevent bleeding

______i. Excite, stimulate, or inhibit parts of nervous system

______j. Used to abolish pain through loss of consciousness

______k. Kill or suppress growth of microorganisms when applied to mucous membranes or skin

______l. Block passage of nerve impulses without loss of consciousness

1. Analgesics
2. Antibiotics
3. Antihistamines
4. Autonomic agents
5. Flavoring agents
6. Fluorides
7. General anesthetics
8. Local anesthetics
9. Hemostatics
10. Local anti-infectives
11. Sedatives
12. Tranquilizers

3. Match methods of administering drugs to their descriptions. Write the correct numbers in the blanks provided.

______a. Injection into muscle

______b. Breathing of gaseous substance

______c. Application to surface

______d. Mouth

______e. Injection in area of organ to be reached

______f. Vein

______g. Injection under skin

______h. Placement under tongue

1. Orally (p.o.)
2. Intravenously (I.V.)
3. Intramuscularly (I.M.)
4. Subcutaneously (sub.q)
5. Topically (top.)
6. Sublingually (Subl.)
7. Infiltration
8. Inhalation (inhal.)

4. Distinguish between characteristics of brand name drugs and generic drugs. Place a "B" for brand name drugs and a "G" for generic drugs in the correct blanks.

______a. Are always capitalized

______b. Controlled by business firms with registered trademarks

______c. Unprotected names that any business firm may use

______d. Are not capitalized

5. Match terms associated with drugs and their effects to the correct descriptions. Place the correct numbers in the blanks provided.

______a. Overdose that causes poisoning

______b. Unavoidable effects which occur at usual dosage level of drug

______c. Sudden reaction to drug resulting in shock or death

______d. Exaggerated degree of usual effect of a medication produced by an unusually small dose

______e. Psychological desire to repeat use of drugs because of emotional reasons

______f. Ability to endure usual effects of a drug, usually from repeated use

______g. Considered an allergic reaction if previously exposed to an agent

______h. Excessive amount of drug present in body

______i. Overdose causing death

1. Hypersensitivity
2. Intolerance
3. Acquired drug tolerance
4. Side effect
5. Drug dependence
6. Overdose
7. Toxic dose
8. Lethal dose
9. Anaphylaxis

6. Select from the list below the role of the dental assistant and drugs. Mark each correct answer with an "X."

______a. Lock all narcotics in safe

______b. Keep all drugs out of sight of patients

______c. Alert yourself to the possibility that someone may try to steal drugs from your office

______d. Handle prescription pads as you would any other office form

______e. Send written prescription if dentist calls narcotic prescription by telephone

______f. Comply fully with Federal drug control regulations

______g. Don't worry about current medication patient is taking

7. Complete the chart below on drugs and their effects when abused by writing the correct information in the blanks provided.

Drug	Pharmacologic Classification	How Taken When Abused	Possible Effects When Abused
Alcohol	Depressant	a.__________	Widely varied, may appear to have a stimulant effect. Slurred speech, staggering, drowsiness, impaired judgment
Morphine	Central nervous system depressant	Orally or by injection	b.__________
Heroin	c.__________	Sniffed or by injection	Same as morphine
d.__________	Depressant	Orally, usually as cough syrup	Drowsiness, pinpoint pupils
Methadone	Depressant	e.__________	Same as morphine
Cocaine	f.__________	Sniffed or by injection	Extreme excitation, tremors, hallucinations
g.__________	Hallucinogen	Smoked or orally	Drowsiness or excitability, dilated pupils, talkativeness, laughter, hallucinations
Barbiturates	Depressant	h.__________	Drowsiness, staggering, slurred speech
Amphetamine drugs	i.__________	Orally or by injection	Excitation, dilated pupils, tremors, talkativeness, hallucinations
j.__________	Hallucinogen	Orally or by injection	Excitation, hallucinations, rambling speech
Glue	Depressent	k.__________	Staggering, drowsiness, slurred speech, stupor

8. Distinguish between epinephrine and atropine sulface by placing an "E" to indicate epinephrine and an "A" for atropine sulfate.

______a. Checks the secretion of saliva so that mouth and throat become dry

______b. Vasoconstrictor which causes pronounced contraction of the arterioles

9. Select from the list below factors affecting storage of drugs and materials in the dental office. Mark each correct answer with an "X."

______a. Exposure to light

______b. Change of temperature

______c. Cost

______d. Exposure to air

______e. Expiration date

______f. Pharmaceutical company

10. Match terms associated with a prescription to the correct descriptions. Write the correct numbers in the blanks provided.

______a. Body of prescription containing name of drug, dosage, form and strength	1. Superscription
	2. Inscription
______b. Designates number of times may be refilled	3. Subscription
______c. Instructions to patient for use of prescription	4. Signa
______d. Dentist must sign all prescriptions	5. D.E.A. number
______e. Rx symbol meaning "take thou"	6. Signature of writer
______f. Direction to pharmacist as to quantities to be dispensed	7. Number of times
______g. Required if narcotic is prescribed	

11. Match frequently used Latin abbreviations to the correct meanings. Place the correct numbers in the blanks provided.

______a. When needed	1. p.o.
______b. Four times daily	2. a.c.
______c. By mouth	3. ad
______d. To, up to	4. p.r.n.
______e. Before meals	5. q.i.d.

______f. Label

______g. Twice daily

______h. Drop

______i. Every

______j. Of each

______k. Not to be repeated

______l. After meals

______m. Take thou

______n. Every four hours

______o. Three times a day

______p. Elixir

______q. Hour of sleep or bedtime

6. p.c.
7. non rep.
8. t.i.d.
9. Sig. or S
10. Rx
11. a.a.
12. h.s.
13. q. 4h
14. b.i.d.
15. gtt
16. Elix.
17. q.

12. Match prefixes in metric system to the correct measurements. Write the correct numbers in the blanks provided.

______a. One thousandth (0.001)

______b. One hundred (100.0)

______c. One (1.0)

______d. One-tenth (0.1)

______e. One thousand (1000.0)

______f. One hundredth (0.01)

______g. One millionth (0.000001)

______h. Ten (10.0)

1. Micro
2. Milli
3. Centi
4. Deci
5. Unit
6. Deka or deca
7. Hecto
8. Kilo

13. Name the symbols that represent each of the metric units given below.

a. Milligram--________________________________

b. Kilogram--________________________________

c. Cubic centimeter--________________________

d. Microgram--_______________________________

e. Gram--____________________________________

f. Liter--____________________________________

14. Name the metric table of liquid volume.
    a. 1 Liter --____________________milliliters (mL)
    b. 1 Liter --____________________cubic centimeters (cc)
15. Name the symbols for each of the units of the apothecaries' system below.
    a. Dram--____________________
    b. Quart--____________________
    c. Minim--____________________
    d. Pint--____________________
    e. Grain--____________________
    f. Ounce--____________________
    g. Gallon--____________________
16. Select from the list below rules of notation using metrics. Mark each correct answer with an "X."
    ______a. A space separates the numerals from the unit symbols
    ______b. A zero precedes the decimal point if the number is less than one
    ______c. Liter and meter can be spelled with an "re" or "er" ending
    ______d. Symbols are not capitalized unless the unit is a proper name
    ______e. Symbols are not followed by an "s" for plurals
    ______f. Spaces, not commas, are used to separate large numbers into groups of three digits
    ______g. Symbols are not followed by periods
17. Write a prescription for doctor's signature.
18. Use *Physicians' Desk Reference*.
19. Check the drugs and supplies in an emergency kit.
20. Convert customary quantity to metric quantity.
21. Demonstrate the ability to:
    a. Prepare a syringe for injection from a vial and an ampule.
    b. Prepare a cartridge syringe.
    c. Use a syringe.

    (NOTE: If activities 17-21 have not been finished before the test, ask the instructor when they should be completed.)

APPLIED DRUGS
UNIT I

ANSWERS TO TEST

1. a. 6
   b. 9
   c. 10
   d. 2
   e. 12
   f. 4
   g. 1
   h. 11
   i. 8
   j. 3
   k. 7
   l. 5

2. a. 11
   b. 1
   c. 5
   d. 3
   e. 12
   f. 2
   g. 6
   h. 9
   i. 4
   j. 7
   k. 10
   l. 8

3. a. 3
   b. 8
   c. 5
   d. 1
   e. 7
   f. 2
   g. 4
   h. 6

4. a. B
   b. B
   c. G
   d. G

5. a. 7
   b. 4
   c. 9
   d. 2
   e. 5
   f. 3
   g. 1
   h. 6
   i. 8

6. a, b, c, e, f

7. a. Orally
   b. Drowsiness or stupor, pinpoint pupils
   c. Depressant
   d. Codeine
   e. Orally or by injection
   f. Central nervous system stimulant
   g. Marijuana
   h. Orally or by injection
   i. Stimulant
   j. LSD
   k. Inhaled

8. a. A
   b. E

9. a, b, d, e

10. a. 2
    b. 7
    c. 4
    d. 6
    e. 1
    f. 3
    g. 5

11. a. 4
b. 5
c. 1
d. 3
e. 2
f. 9
g. 14
h. 15
i. 17
j. 11
k. 7
l. 6
m. 10
n. 13
o. 8
p. 16
q. 12

12. a. 2
b. 7
c. 5
d. 4
e. 8
f. 3
g. 1
h. 6

13. a. mg
b. kg
c. cc
d. mcg
e. g
f. L

14. a. 1,000 millileters (mL)
b. 1,000 cubic centimeters

15. a. dr or ʒ
b. qt
c. m
d. pt
e. gr
f. oz or ℥
g. gal

16. a, b, c, d, e, f, g
17. Evaluated to satisfaction of instructor
18. Evaluated to satisfaction of instructor
19. Evaluated to satisfaction of instructor
20. Evaluated to satisfaction of instructor
21. Performance skills evaluated to satisfaction of instructor

EMERGENCIES
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to recognize emergency symptoms, and prepare for and assist doctor with emergency patients. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 100 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with emergencies to the correct definitions.
2. Select from a list reasons for increased emergencies in the dental office.
3. Select from a list reasons trained dental assistants are needed in an emergency.
4. State precautions to take with the premedicated patient.
5. Select from a list steps to follow in an emergency.
6. Describe ways to stop hemorrhage from laceration of oral tissue.
7. Distinguish between signs or symptoms that would indicate diabetic coma and insulin shock.
8. Complete a chart of causes, symptoms, and treatment of anaphylactic shock, fainting, and heart attack.
9. Demonstrate the ability to:
    a. Perform CPR (cardiopulmonary resuscitation).
    b. Prepare insulin for emergency injection.
    c. Eject a lodged object using Heimlich Maneuver.
    d. Assist with emergency in the dental office.

EMERGENCIES
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

A. Provide student with objective sheet.

B. Provide student with information, assignment, and job sheets.

C. Make transparencies.

D. Order film.

E. Discuss unit and specific objectives.

F. Provide student with equipment and materials for job sheets.

G. Demonstrate and discuss job sheets.

H. Invite a first aid person to speak to class.

Examples: First aid course instructor, Red Cross, industrial (medical division)

I. Invite a former student to speak with class on common accidents and emergencies in the dental office. Stress that emergencies aren't planned, and the dental assistant has to be ready for them as they do any chairside procedure.

Example: Have speaker surprise students by role playing any common emergency, such as fainting. Appoint two or three students to take care of him or her. This helps students do some serious thinking before an emergency really happens.

J. Have students demonstrate what they would do in certain emergencies.

Example: Bleeding

K. Caution students against making statements which cause patient fear.

Examples: "Is this the procedure that caused Mrs. Noname to faint?"
"Doctor, where is all that blood coming from?"

L. Instruct students to ask the location of emergency supplies in the office where they are trained or employed.

Examples: Emergency kit, oxygen

M. Lead a discussion on displaced mandible.

Example: Procedure-pushing downward and backward on mandible

N. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters

1. TM 1--Dislocated Mandible
2. TM 2--Visuals of Shock
3. TM 3--Emergency Kit
4. TM 4--Heart-Lung Resuscitation
5. TM 5--Heart-Lung Resuscitation(continued)
6. TM 6--Heart-Lung Resuscitation(continued)

D. Job sheets

1. Job Sheet #1--Perform CPR (Cardiopulmonary Resuscitation)
2. Job Sheet #2--Prepare Insulin for Emergency Injection
3. Job Sheet #3--Eject a Lodged Object using Heimlich Maneuver
4. Job Sheet #4--Assist With Emergency in the Dental Office

E. Test

F. Answers to test

III. Unit references:

A. Richardson, Richard E., and Barton, Rogers E. *The Dental Assistant.* 5th ed. New York: McGraw-Hill Book Company, 1978.

B. Schwarzrock, Shirley Pratt and Jenson, James R. *Effective Dental Assisting.* Dubuque, Iowa: Wm. C. Brown Company, 1976.

C. Rogers, Helen. *Nursing II.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1977.

D. Sloan, Jamee. *Medical Assistant.* Stillwater: Curriculum and Instructional Materials Center/State Department of Vocational and Technical Education, 1980.

IV. Filmstrips

A. "Methods of Artificial Ventilation." Available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.

B. "Methods of Cardiopulmonary Resuscitation." Available from Trainex Corporation.

EMERGENCIES
UNIT II

INFORMATION SHEET

I. Terms and definitions

  A. Emergency--Unforeseen combination of circumstances that calls for immediate action

  B. Pallor--Lack of color, especially in the face

  C. Glucose--Light-colored syrup made from corn starch

  (NOTE: The body also manufactures glucose during digestion.)

  D. Capillary hemorrhage--Slow dripping or oozing of blood from tissue

  E. Venous hemorrhage--Steady flow of dark blood

  F. Arterial hemorrhage--Spurting of bright red blood

  G. Asthma--Condition of an allergic origin, marked by wheezing and labored breathing

  H. Stroke--Rupture of a blood vessel or blood clot that can cause damage to brain tissue

  I. Epilepsy--Chronic disorder caused by abnormal brain wave function that causes victim to have seizures; may experience convulsions and become unconscious

  J. Diabetes mellitus--Disorder of carbohydrate metabolism characterized by hyperglycemia and glycosuria

  (NOTE: Diabetes mellitus is usually caused by malfunction of the pancreas that results in limited or no secretion of insulin. It may be a result of malfunctions of other endocrine glands.)

  K. Dislocated mandible--Incoordination of muscle action that guides the movement of the condyle (Transparency 1)

  (NOTE: This doesn't happen too often in the dental office, but presents an unusual situation when it does. It is usually caused by fatigue or stress due to lengthy operative procedure, yawning or opening mouth too wide. You may be asked to assist the dentist in the procedure of repositioning the mandible.)

  L. Syncope--Temporary suspension of consciousness and sudden loss of strength

INFORMATION SHEET

II. Reasons for increased emergencies in the dental office

  A. Use of highspeed rotary instruments

    Examples: Particles entering air passage

  B. Increased number of elderly patients who are more susceptible to stress

    Examples: Shock, strokes, hypertension (Transparency 2)

  C. Reactions to common drugs

    Examples: Hidden side effects, allergies, drug interaction

III. Need for trained dental assistants in emergency

(NOTE: The increased number of patients and auxiliary personnel has placed the responsibility of awareness of emergencies on the dental assistant.)

  A. Recognize early stages of stressful situations

  B. Recognize symptoms of patient emergency

  C. Familiar with equipment and methods of treatment (Transparency 3)

  D. Able to assist patient until doctor's service can be obtained

    (NOTE: This can sometimes mean the difference between life and death.)

IV. Precautions to take with the premedicated patient

  A. Never leave patient unattended

  B. Keep patient at office until it is safe for patient to leave

  C. Observe patient closely for complications

V. Steps to follow in an emergency

(NOTE: Each emergency presents its own problems, but these general considerations will apply to practically all situations.)

  A. Notify the dentist immediately

  B. Remain as quiet and calm as you can

  C. Keep patient lying down in a comfortable position

    (NOTE: Keep head level with body until seriousness is determined.)

  D. Check airway of patient if unconscious (Transparency 4)

  E. Loosen tight clothes around neck and waist

INFORMATION SHEET

F. Turn patient's head to one side if patient is vomiting

G. Perform first aid only if trained

VI. Ways to stop hemorrhage from laceration of oral tissue

A. Place sterile gauze pad over injured area for capillary bleeding; apply pressure

B. Use sterile gauze saturated with epinephrine hydrochloride for more profuse bleeding

C. Clamp or suture deep laceration of vessels

(NOTE: Some doctors will administer vitamin K.)

VII. Signs or symptoms that would indicate diabetic coma and insulin shock

A. Diabetic coma

(NOTE: Diabetic coma is caused by a lack of insulin, resulting in an overload of carbohydrate, fat and protein, causing dehydration and electrolyte imbalance.)

1. Restlessness, thirst, drowsiness
2. Rapid pulse, deep respiration
3. Skin appears hot, dry, and flushed
4. Coma

(NOTE: Diabetic coma is usually treated by giving some form of insulin either sub. q or I.V.)

B. Insulin shock

(NOTE: Excessive insulin causes lowering of blood sugar.)

1. Headache, nervousness, hunger
2. Fainting and sweating
3. Skin appears cool, moist and pale
4. Convulsions

(NOTE: Insulin shock is usually treated by giving some form of glucose.)

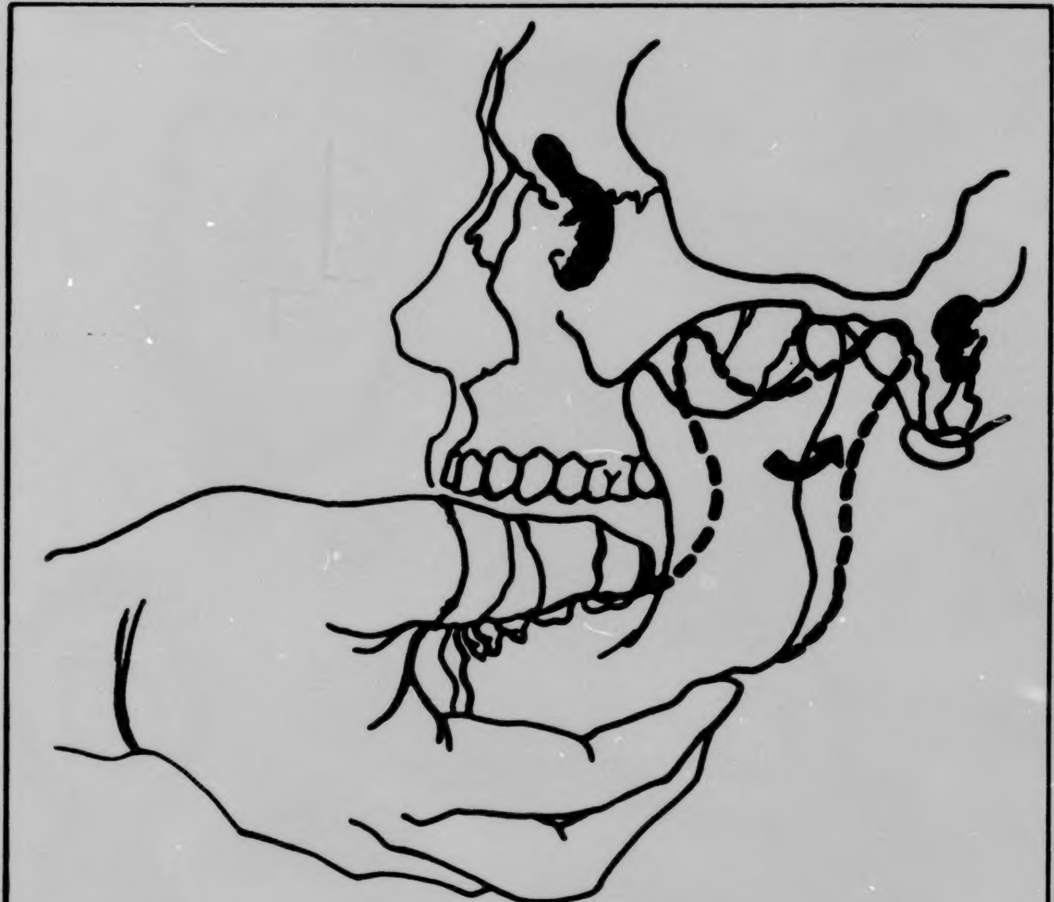
Examples: Orange juice with sugar, hard candy or I.V. glucose

INFORMATION SHEET

VIII. Causes, symptoms, and treatment of anaphylactic shock, fainting, and heart attack (Transparencies 4, 5 and 6)

EMERGENCY	CAUSE	SYMPTOMS	TREATMENT
Anaphylactic shock	Allergic reaction	Rash, itching, impaired breathing	Place patient in horizontal position with legs elevated. Assist doctor with choice of drugs given Example: Epinephrine
Fainting	(In the dental office) Fear, apprehension Poor technique, causing fears Example: Letting patient see needles	Sweating, low blood pressure, pallor	Tilt dental chair in horizontal position to improve blood supply to head Use aromatic ammonia Prepare for administration of oxygen
Heart attack	Collapse of blood vessels to heart or a blood clot (NOTE: This is a general definition of cause.)	Appears deathly pale Pain in chest which radiates to left arm Feeling of numbness and weakness	Place nitroglycerine, 1/200 grains under tongue Prepare for administration of oxygen

Dislocated Mandible



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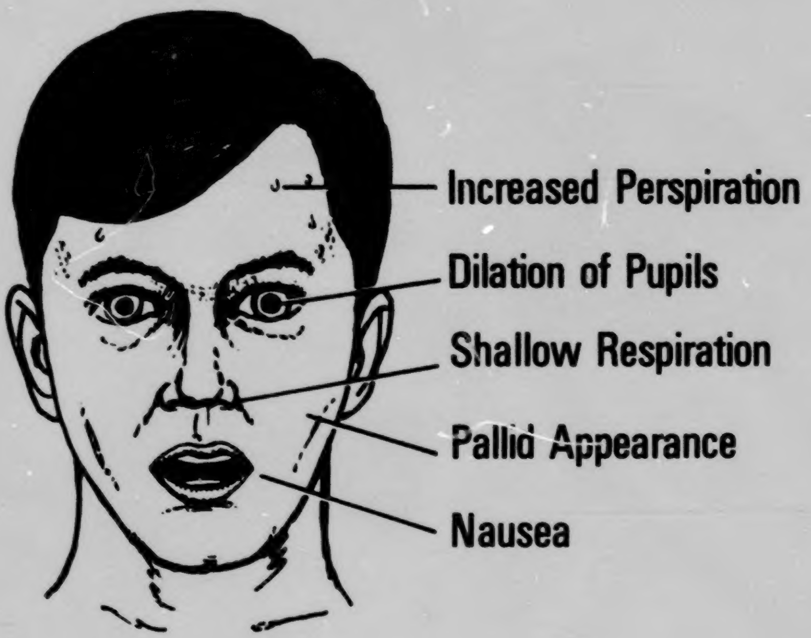
Visuals of Shock


Increased Perspiration
Dilation of Pupils
Shallow Respiration
Pallid Appearance
Nausea

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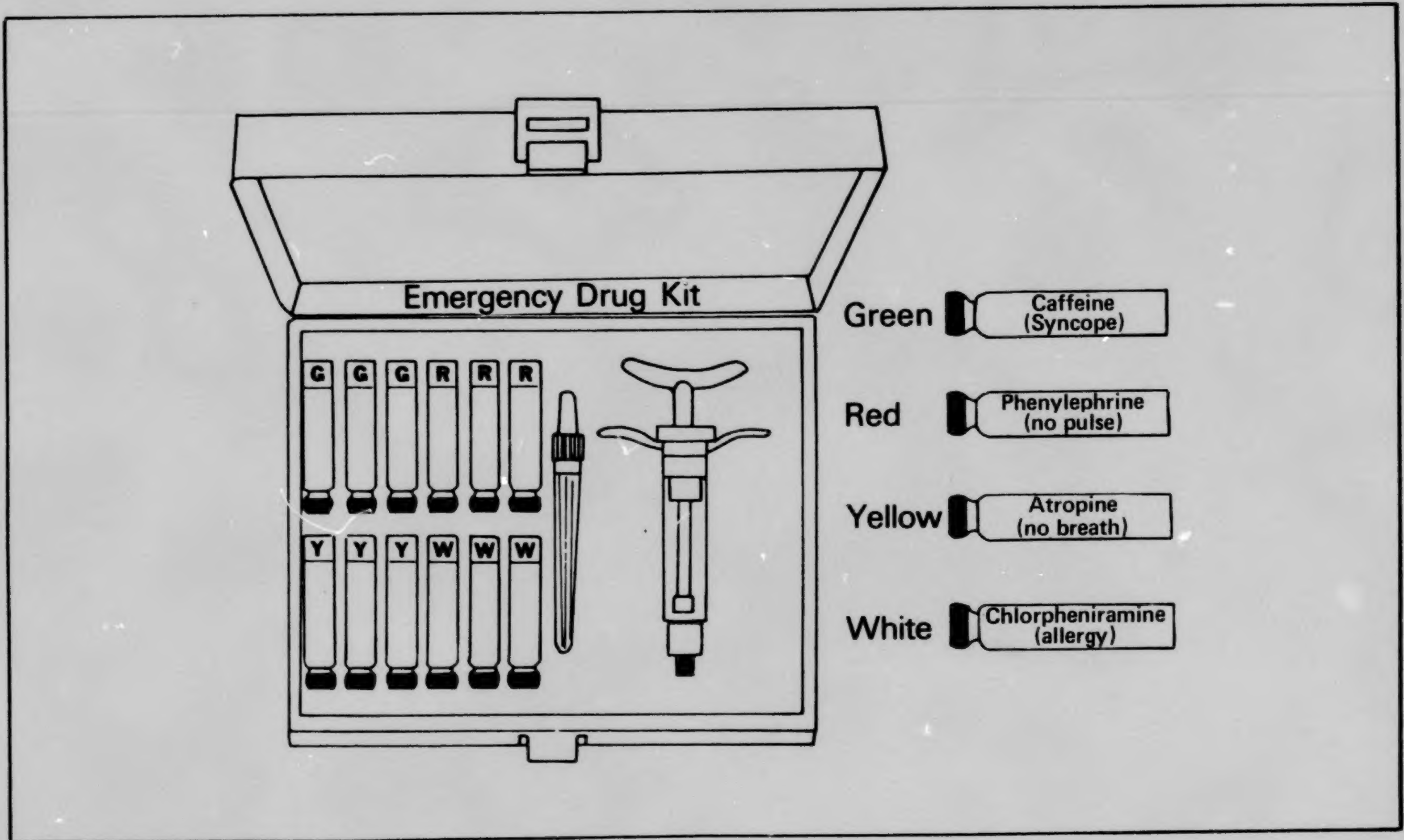
Emergency Kit


Emergency Drug Kit
G
G
G
R
R
R
Y
Y
Y
W
W
W
Green
Caffeine (Syncope)
Red
Phenylephrine (no pulse)
Yellow
Atropine (no breath)
White
Chlorpheniramine (allergy)

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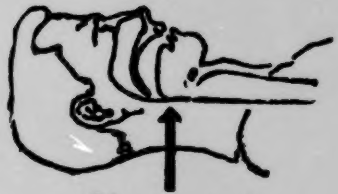
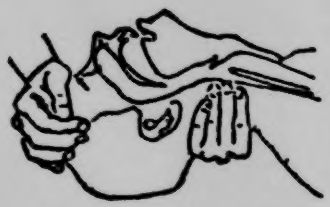
Heart-Lung Resuscitation

National Academy of Sciences

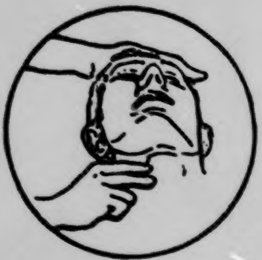
Ⓐ Airway

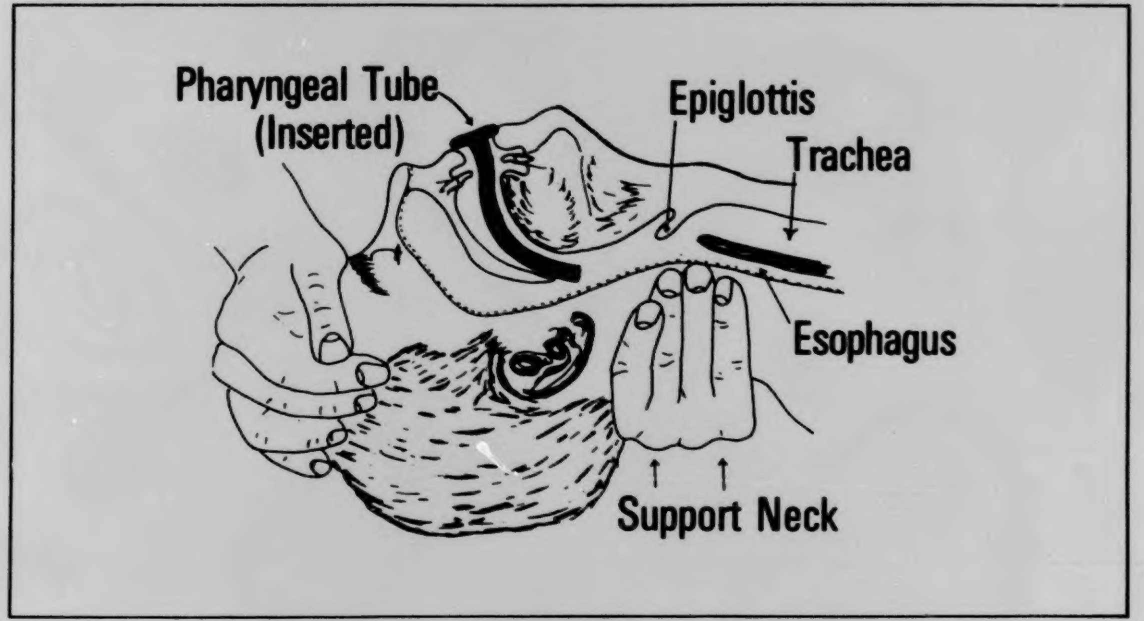


Obstructed



Opened




Pharyngeal Tube
(Inserted)
Epiglottis
Trachea
Esophagus
Support Neck

Airway Tube Positioned

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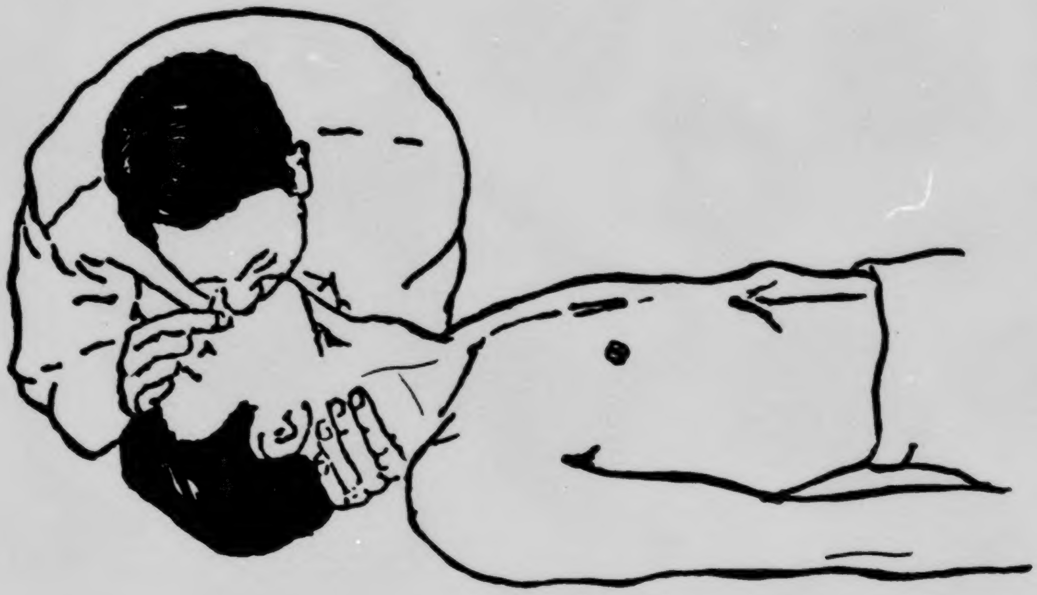
Heart-Lung Resuscitation

(Continued)

Ⓑ Breathing

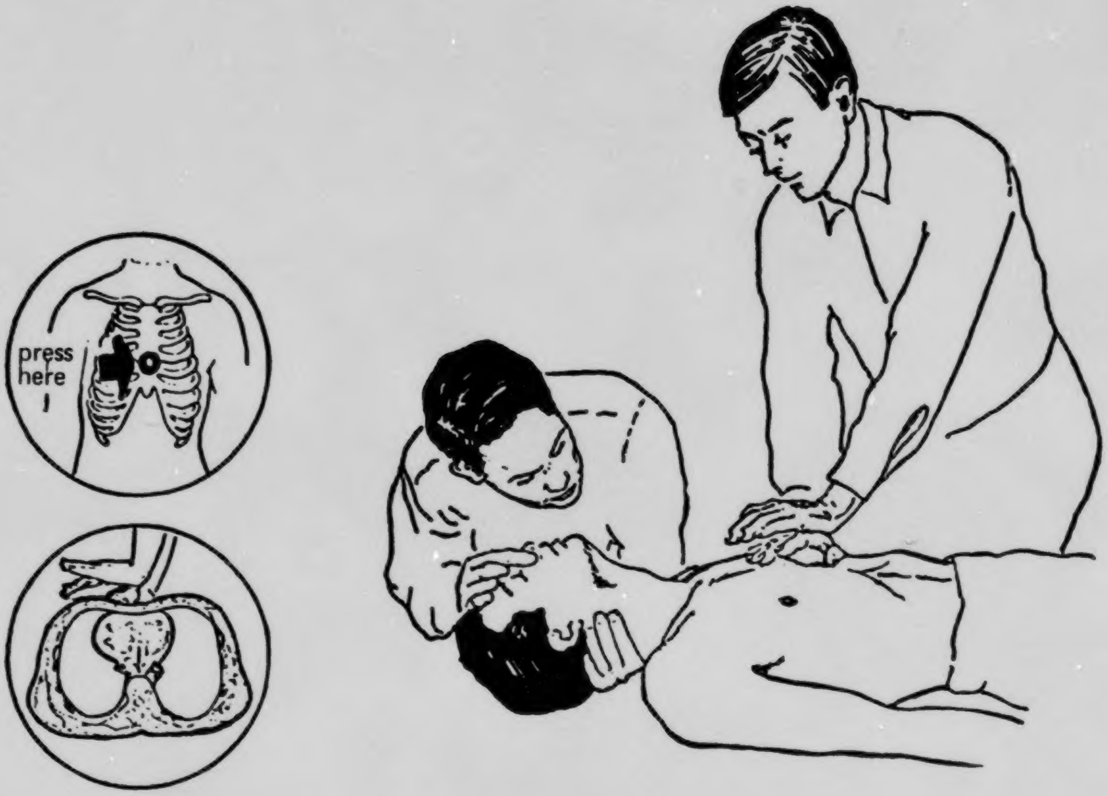
If carotid pulse is present continue 12 lung inflations per minute



Heart- Lung Resuscitation

(Continued)

Ⓒ Circulation



One Operator – alternate 2 quick inflations with 15 compressions

Two Operators – interpose one inflation after every fifth compression

EMERGENCIES
UNIT II

JOB SHEET #1--PERFORM CPR (CARDIOPULMONARY RESUSCITATION)

(NOTE: CPR should be done by a qualified person who has been effectively trained. Many lives could be saved if everyone knew how to perform cardiopulmonary resuscitation.)

I. Equipment--To practice CPR, it is advisable to use the training mannequins that are actually equipped with "breathing" and "heartbeat" devices

(NOTE: These can be obtained from the Red Cross units or hospital inservice training programs.)

II. Procedure

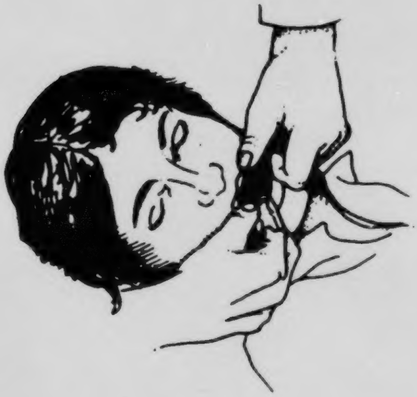
A. Establish open airway

(NOTE: The most accepted way to do this is mouth-to-mouth or mouth-to-nose method.)

1. Remove any foreign substance from the mouth (Figure 1)
2. Remove any prostheses such as dentures, partials, or pontics

   (NOTE: If possible, use cloth to cover fingers.)

FIGURE 1



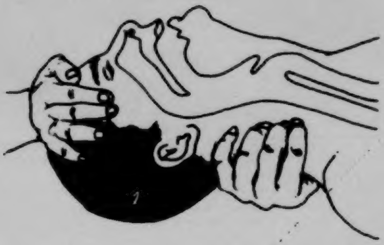
3. Position victim's head backward so that chin is pointing upward (Figure 2)

JOB SHEET #1

4. Place one hand under victim's neck and lift; place heel of other hand on victim's forehead and move head backward (Figure 2)

   (NOTE: In many cases this may open the airway and no other action would be needed. At this time you may need to administer oxygen, depending on the condition. If not available proceed with mouth-to-mouth resuscitation.)

FIGURE 2



B. Begin artificial respiration

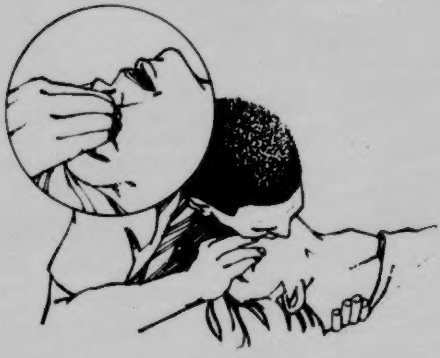
1. Hold victim's nostrils shut with the thumb and index finger of your hand that is on victim's forehead

   (NOTE: This will prevent leakage of air.)

2. Open your mouth wide, take a deep breath, and blow air into victim's mouth, making sure that there is a tight seal over victim's mouth (Figure 3)

   (NOTE: Provide at least one breath every five seconds for adults, or twelve per minute.)

FIGURE 3



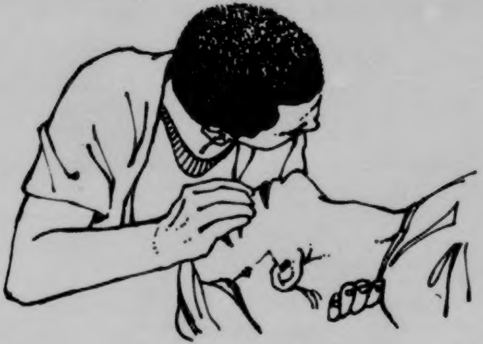
3. Check results by watching victim's chest to see if it rises and falls after breath

JOB SHEET #1

4. Stop blowing when victim's chest expands; turn your head to side and listen for exhaled air (Figure 4)

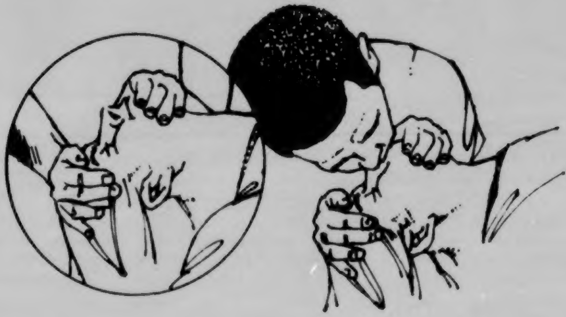
   (NOTE: Make sure exhalation takes place.)

FIGURE 4



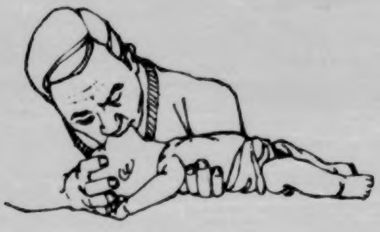
(NOTE: In some cases, it is necessary to use mouth-to-nose breathing. The backward tilt of head is used, but victim's mouth is closed. A tight seal is made by the mouth over victim's nose and air is blown in. For exhalation, the mouth is opened to allow air to escape. See Figure 5.)

FIGURE 5



(NOTE: In infants or young children, the mouth and nose should be sealed by the mouth and a breath should be blown in every three seconds with less pressure and volume than used for the adult. Only small puffs need to be used for infants. See Figure 6.)

FIGURE 6



JOB SHEET #1

(CAUTION: If exchange is not being made, be sure to check for airway obstruction. If necessary, turn the adult to side and administer sharp blows between the shoulder blades to shake the material free. A child may be suspended for a moment by the ankles or turned upside down over one arm and given two or three sharp blows between the shoulder blades. See Figures 7 and 8.)

FIGURE 7

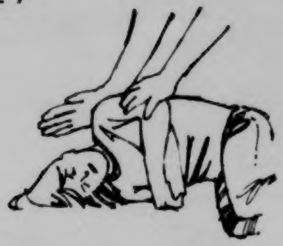
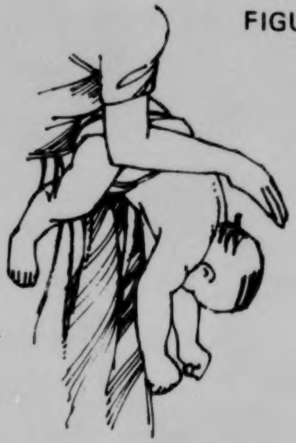


FIGURE 8



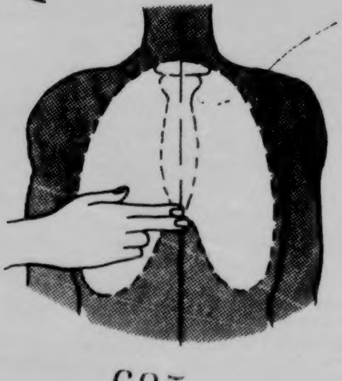
C. Begin external cardiac massage

(CAUTION: This procedure should also be practiced on one of the mannequins designed for CPR training.)

(NOTE: Artificial circulation can be provided by giving external cardiac compression that can force the heart to pump blood.)

1. Kneel at victim's side near chest
2. Locate the lowest part of the sternum (breast bone) called the xiphoid (Figure 9)

FIGURE 9



JOB SHEET #1

3. Place heel of one hand about 1" -1 1/2" away from that tip (Figures 10 and 11)

FIGURE 10

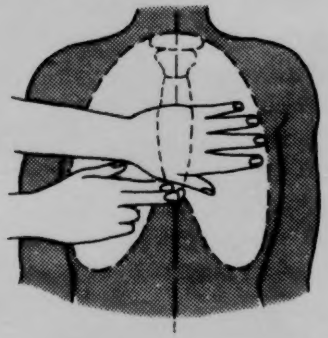
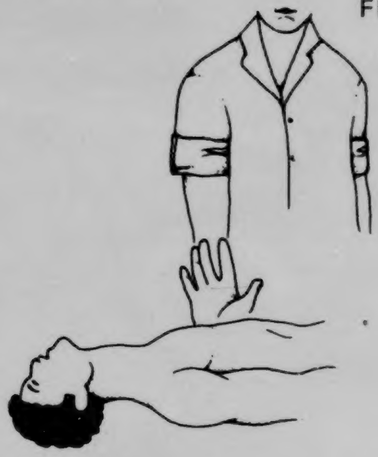


FIGURE 11



(NOTE: Make sure you use only the heel of the hand because to use all of the hand might exert more pressure than needed, resulting in injury to ribs.)

4. Place your other hand on top of the one that is in position; be sure to keep fingers off the chest wall (Figures 12 and 13)

(NOTE: Interlacing of fingers will keep this from happening.)

FIGURE 12

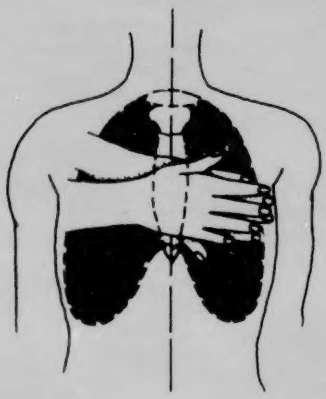
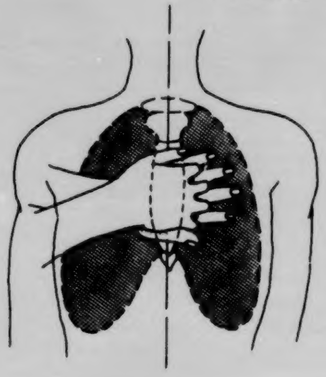


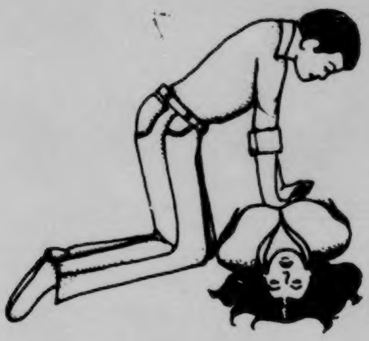
FIGURE 13



JOB SHEET #1

5. Bring shoulders directly over victim's sternum, keeping your arms straight, and compress downward (Figure 14)

FIGURE 14



6. Depress sternum about 1 1/2"-2" for an adult victim

   (NOTE: Cardiac compression is different for small children and infants. Only one hand is needed for compression with the other hand slipped under the child's back for support. Use only tips of index and middle fingers for infants and depress mid-sternum 1/2"-3/4" at a rate of eighty to one hundred times a minute. For small children, use the heel of one hand and depress 3/4"-1 1/2" at a rate of eighty to one hundred times per minute. Breaths should be given after every fifth compression.)

7. Without removing your hands from the victim's body, relax after each compression using a rhythmical, rocking motion, allowing chest to return to normal position after compression

   (NOTE: If you are the only rescuer, you have to provide breathing and cardiac compression. Use the ratio fifteen cardiac compressions to two breaths. The rate of compressions should be approximately eighty times per minute. If there are two rescuers, the ratio should be five cardiac compressions to one breath and rate of cardiac compressions should be approximately sixty per minute.)

EMERGENCIES
UNIT II

JOB SHEET #2--PREPARE INSULIN FOR EMERGENCY INJECTION

(NOTE: Some of your patients will be diabetics and may need a shot of insulin while in the dental office. Be prepared to load an insulin syringe as ordered.)

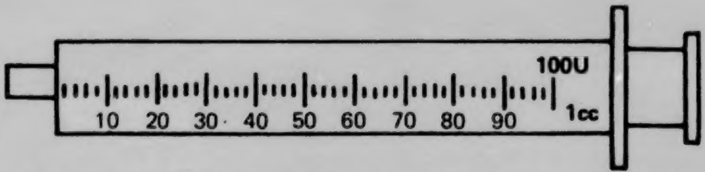
I. Materials

   A. Color-coded vials of insulin

   B. Color coded insulin syringes with needles

      (NOTE: U-100 is orange.)

      Example:



One-ml. (100 U./ml. Scale) Insulin Syringe

(NOTE: The national trend is leading toward the use of U-100 insulin with appropriate syringe to be used totally. This would ensure that every patient would have only one type to use and would prevent serious errors being made by the use of several strengths. U-40 and U-80 may still be used in some areas, so become familiar with types available in your office.)

   C. Cotton sponges

   D. Disinfectant

   E. Waste containers for used liquid from vials

   F. Chart with medication order

II. Procedure

   A. Wash hands

   B. Assemble equipment

   C. Check to see that insulin is the correct strength to administer prescribed dosage

JOB SHEET #2

D. Select a syringe that corresponds to the unit/cc strength of the vial of insulin

E. Rotate vial of insulin to ensure even mixture of solution

(CAUTION: Do not agitate vigorously.)

F. Assemble syringe if necessary

G. Check dosage

  1. Read chart with medication order

  2. Check syringe and vial to be certain you are using the correct type of insulin and proper syringe

H. Wipe top of vial with cotton sponge and disinfectant

I. Draw back plunger of syringe, drawing in a volume of air equal to the volume of insulin to be withdrawn from vial

J. Push needle of syringe into the rubber cap of the vial

K. Push air into vial

L. Invert vial

M. Withdraw required amount of insulin from the vial

N. Hold plunger tightly with the little finger and pull the needle from the bottle

O. Check dose again verbally with dentist

P. Have the dentist check the dose of insulin

(CAUTION: When checking dosage it is important that the dentist see both bottle insulin is taken from and filled syringe.)

Q. Hand the insulin syringe to dentist

R. Return insulin to refrigerator

S. Care for equipment as instructed when procedure is completed

EMERGENCIES
UNIT II

JOB SHEET #3–EJECT A LODGED OBJECT USING HEIMLICH MANEUVER

I. Materials--Another person to serve as patient

II. Procedure for standing patient

A. Position yourself behind patient

B. Wrap arms around waist, making fist with one hand (Figures 1 and 2)

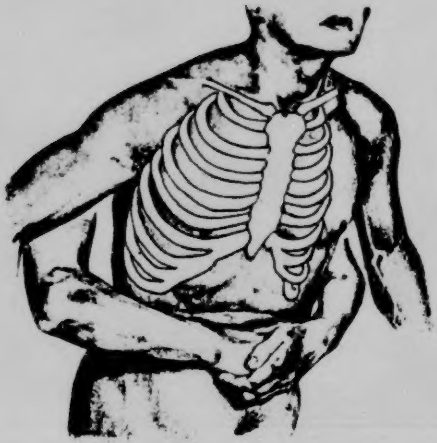


FIGURE 1

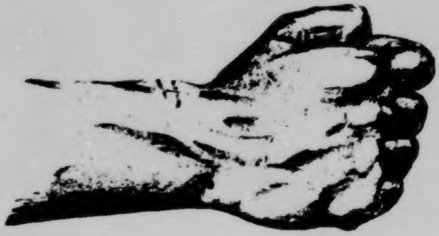


FIGURE 2

Used with permission of Continental Oil Company.

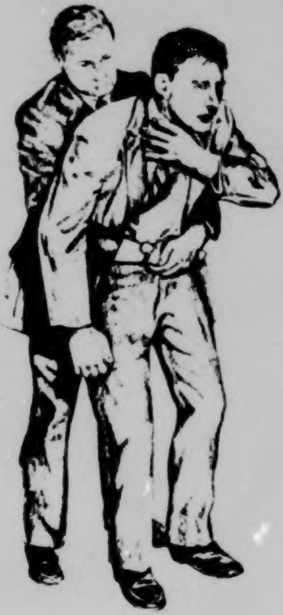
C. Press thumb side against stomach, slightly above patient's navel

D. Grasp fist with other hand

JOB SHEET #3

E. Press rapidly and strongly into stomach in an upward thrust, forcing diaphragm upward to expel object (Figure 3)

FIGURE 3

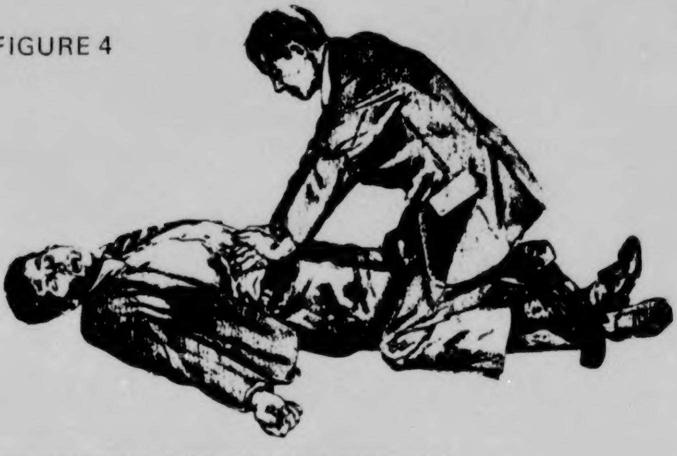


III. Procedure for patient lying down

A. Position patient face up

B. Position yourself in stride above patient's hips (Figure 4)

FIGURE 4



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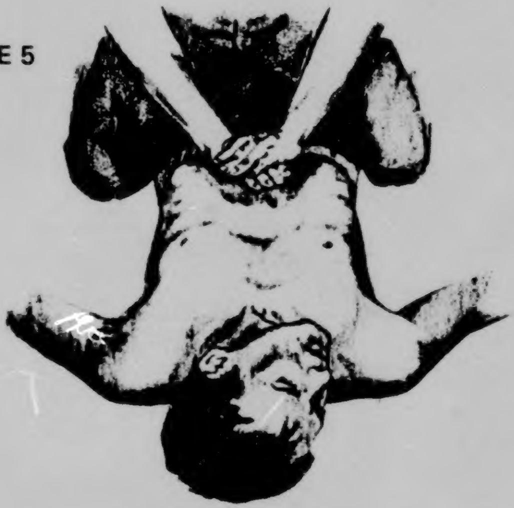
JOB SHEET #3

C. Place one hand on top of the other in middle of stomach slightly above navel (Figure 5)

FIGURE 5



Used with permission of Continental Oil Company.

D. Press stomach with sudden upward thrust

(NOTE: If possible, another person should assist in removing object. If another person is not available, use fingers to pull object out.)

E. Turn patient on side immediately if they vomit

F. Wipe patient's mouth

EMERGENCIES
UNIT II

JOB SHEET #4--ASSIST WITH EMERGENCY IN THE DENTAL OFFICE

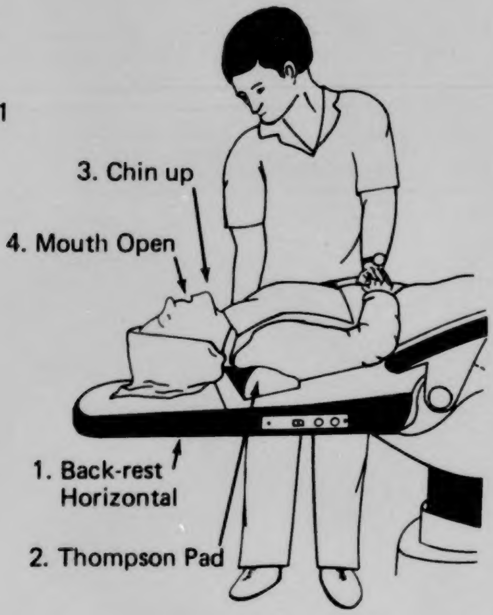
I. Materials

- A. Dental chair
- B. Oxygen tank
- C. Ammonia inhalant
- D. 2 x 2 gauze
- E. Pharyngeal tube

II. Procedure for syncope

- A. Lower back rest on chair to horizontal position (Figure 1)
- B. Place a pad or pillow under patient's shoulder (Figure 1)
- C. Raise patient's chin up to open airway (Figure 1)
- D. Open patient's mouth (Figure 1)

FIGURE 1


3. Chin up
4. Mouth Open
1. Back-rest Horizontal
2. Thompson Pad

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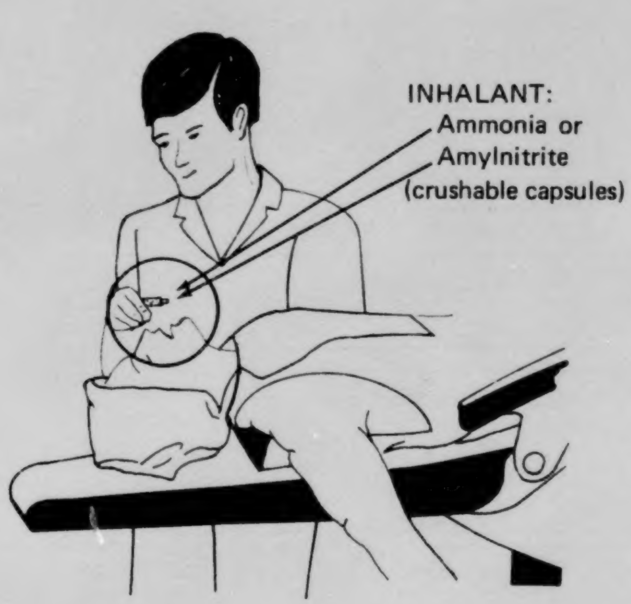
JOB SHEET #4

E. Hold ammonia inhalant in front of patient's nose (Figure 2)

FIGURE 2


INHALANT:
Ammonia or
Amylnitrite
(crushable capsules)

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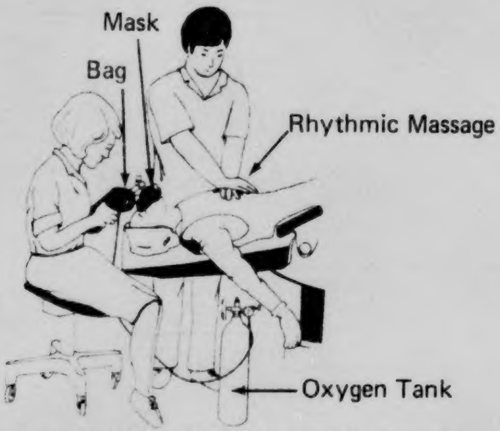
III. Procedure for cardiac arrest or serious respiratory problem

A. Hand doctor oxygen mask and bag

B. Perform rhythmic massage if asked (Figure 3)

FIGURE 3


Mask
Bag
Rhythmic Massage
Oxygen Tank

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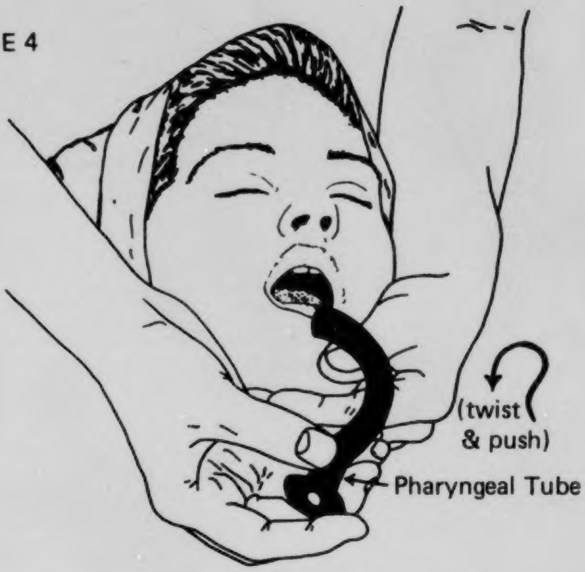
JOB SHEET #4

C. Hand doctor pharyngeal tube if needed (Figure 4)

FIGURE 4


(twist
& push)
Pharyngeal Tube

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EMERGENCIES
UNIT II

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with emergencies to their correct definitions. Write the correct numbers in the blanks provided.

______a. Chronic disorder caused by abnormal brain wave function that causes victim to have seizures; may experience convulsions and become unconsious

______b. Incoordination of muscle action that guides the movement of the condyle

______c. Spurting of bright red blood

______d. Disorder of carbohydrate metabolism characterized by hyperglycemia and glycosuria

______e. Slow dripping or oozing of blood from tissue

______f. Unforeseen combination of circumstances that calls for immediate action

______g. Steady flow of dark blood

______h. Lack of color, especially in the face

______i. Rupture of a blood vessel or blood clot that can cause damage to brain tissue

______j. Light-colored syrup made from corn starch

______k. Condition of an allergic origin, marked by wheezing and labored breathing

1. Emergency
2. Pallor
3. Glucose
4. Capillary hemorrhage
5. Venous hemorrhage
6. Arterial hemorrhage
7. Asthma
8. Stroke
9. Epilepsy
10. Diabetes mellitus
11. Dislocated mandible

2. Select from the list below reasons for increased emergencies in the dental office. Mark each correct answer with an "X."

______a. Carbohydrate metabolism

______b. Reactions to common drugs

______c. Increased number of elderly patients who are more susceptible to stress ______d. Drug addiction

______e. Use of high speed rotary instruments

______f. Incompetent help in dental office

3. Select from the list below the reasons trained dental assistants are needed in an emergency. Mark each correct answer with an "X."

______a. Recognize early stages of stressful situations

______b. Able to assist patient until doctor's service can be obtained

______c. Best person to notify relatives

______d. Recognize patients' habits

______e. Familiar with equipment and methods of treatment

______f. Prevention of malpractice suits

______g. Recognize symptoms of patient emergency

4. State precautions to take with the premedicated patient.

a. ____

b. ____

c. ____

5. Select from the list below steps to follow in an emergency. Mark each correct answer with an "X."

______a. Check airway of patient if unconscious

______b. Keep patient lying down in a comfortable position

______c. Check pulse at wrist

______d. Perform first aid only if trained

______e. Remain as quiet and calm as you can

______f. Check chart for medical history

______g. Notify the dentist immediately

______h. Call patient's relatives

______i. Turn patient's head to one side if patient is vomiting

______j. Administer liquids

______k. Loosen tight clothes around neck and waist

6. Describe ways to stop hemorrhage from laceration of oral tissue.

a. ____________________

b. ____________________

c. ____________________

7. Distinguish between signs and symptoms of diabetic coma and insulin shock. Write a "D" to indicate signs of symptoms of diabetic coma, and an "I" to show signs and symptoms of insulin shock.

______a. Fainting and sweating

______b. Convulsions

______c. Coma

______d. Rapid pulse, deep respiration

______e. Skin appears cool, moist, and pale

______f. Restlessness, thirst, drowsiness

______g. Headache, nervousness, hunger

______h. Skin appears hot, dry and flushed

8. Complete the chart below on causes, symptoms, and treatments of anaphylactic shock, fainting, and heart attack. Write the correct answers in the blanks provided.

EMERGENCY	CAUSE	SYMPTOMS	TREATMENT
Anaphylactic shock	Allergic reaction	a. ____________________ ____________________ ____________________	Place patient in horizontal position with legs elevated. Assist doctor with choce of drugs given
Fainting	(In the dental office) Fear, apprehension Poor technique, causing fears	Sweating, low blood pressure, pallor	b. ____________________ ____________________ ____________________ ____________________ ____________________ ____________________ ____________________ ____________________
c. ______________	Collapse of blood vessels to heart or a blood clot (NOTE: This is a general definition of cause.)	Appears deathly pale Pain in chest which radiates to left arm Feeling of numbness and weakness	c. ____________________ ____________________ ____________________ ____________________ ____________________

9. Demonstrate the ability to:

    a. Perform CPR (cardiopulmonary resuscitation).

    b. Prepare insulin for emergency injection.

    c. Eject a lodged object using Heimlich maneuver.

    d. Assist with emergency in the dental office.

    (NOTE: If activity 9 has not been finished before the test, ask your instructor when it should be completed.)

EMERGENCIES
UNIT II

ANSWERS TO TEST

1. a. 9
   b. 11
   c. 6
   d. 10
   e. 4
   f. 1
   g. 5
   h. 2
   i. 8
   j. 3
   k. 7

2. b, c, e

3. a, b, e, g

4. a. Never leave patient unattended
   b. Keep patient at office until it is safe for patient to leave
   c. Observe patient closely for complications

5. a, b, d, e, g, i, k

6. a. Place a sterile gauze pad over injured area for capillary bleeding; apply pressure
   b. Use sterile gauze saturated with epinephrine hydrochloride for more profuse bleeding
   c. Clamp or suture deep laceration of vessels

7. a. I
   b. I
   c. D
   d. D
   e. I
   f. D
   g. I
   h. D

8. a. Rash, itching, impaired breathing
   b. Tilt dental chair in horizontal position to improve blood supply to head; use aromatic ammonia; prepare for administration of oxygen
   c. Heart attack
   d. Place nitroglycerin, 1/200 grains under tongue; prepare for administration of oxygen

9. Performance skills evaluated to satisfaction of instructor

PATIENT EDUCATION
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to instruct patient in oral health care and evaluate diets for proper nutritional needs. This knowledge will be evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with patient education to the correct definitions.
2. Select from a list basic facts about plaque.
3. List methods of eliminating plaque.
4. Select from a list methods of lessening susceptibility to plaque.
5. State parts of a basic patient education program.
6. Select from a list steps in teaching patient education.
7. State the difference between stannous and sodium fluoride.
8. Select foods to meet minimum nutritional needs.
9. Eliminate excess sucrose in diet.
10. Compare oral cleansing products.
11. Form responses to questions most frequently asked by patients.
12. Demonstrate the ability to:
    a. Instruct patient in oral hygiene (first visit).
    b. Instruct patient in oral hygiene (second visit).
    c. Instruct patient in oral hygiene (third visit).
    d. Instruct patient in oral hygiene (fourth and fifth visits).
    e. Prepare a modified Snyder test.

PATIENT EDUCATION
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information, assignment, and job sheets.

   C. Order film.

   D. Make transparencies.

   E. Discuss unit and specific objectives.

   F. Discuss assignment and job sheets.

   G. Prepare your operatory or classroom the evening before you are going to teach this unit with motivational tools.

   Examples: Hang a fork from the ceiling of operatory or classroom, put up a poster that says "Get the Red Tablet Habit."

   This is done to stimulate questions: Why is the fork hanging from the ceiling? Answer: If patients kept their teeth as clean as their silver, we would not have to teach patient education.

   H. Explain that the cycle of tooth decay and repair can be stopped when the cause of disease is understood and eliminated.

   Example: Use a chain of ants and how busy they are to illustrate activity of microorganisms

   I. Invite a hygienist to speak to class.

   (NOTE: If application of fluorides is needed at this point, Job Sheet #2 from the Pedodontics unit may be used--Section F, Unit IV.)

   J. Have a class committee establish an educational program for parents on diet and oral hygiene.

   (NOTE: If parents are educated, they will be more cooperative with the assignment sheets used in this unit.)

   K. Have students give a demonstration on brushing and flossing to another class. They should explain that practicing good oral hygiene will save time and money lost from work by going to the dentist.

   (NOTE: This may be used as a HOSA activity.)

L. Have students bring a sugar substitute snack for class break.

M. Demonstrate the use of a floss threader to students.

N. Lead a discussion on how the doctor determines the need for patient education.

Examples: Condition of the oral cavity, accumulation of plaque

O. Instruct students that Assignment Sheet #3 is for classroom instruction and **not** to be promoted in the dental office.

P. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment sheets

1. Assignment Sheet #1--Select Foods to Meet Minimum Nutritional Needs
2. Assignment Sheet #2--Eliminate Excess Sucrose in Diet
3. Assignment Sheet #3--Compare Oral Cleansing Products
4. Assignment Sheet #4--Form Responses to Questions Most Frequently Asked by Patients

D. Answers to assignment sheets

E. Job sheets

1. Job Sheet #1--Instruct Patient in Oral Hygiene (first visit)
2. Job Sheet #2--Instruct Patient in Oral Hygiene (second visit)
3. Job Sheet #3--Instruct Patient in Oral Hygiene (third visit)
4. Job Sheet #4--Instruct Patient in Oral Hygiene (fourth and fifth visits)
5. Job Sheet #5--Prepare a Modified Snyder Test

F. Test

G. Answers to test

III. Unit references:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W.B. Saunders Co., 1976.

B. Castano, Francis A., and Alden, Betsy A. *Handbook of Expanded Dental Auxiliary Practice.* Philadelphia: J.B. Lippincott Co., 1973.

C. Richardson, Richard E., and Barton, Rogers E. *The Dental Assistant.* 5th ed. New York: McGraw-Hill Book Company, 1978.

IV. Additional materials:

A. Films

(NOTE: All of the films below are available from the Central Office Film Library, Veterans Administration, 810 Vermont Ave., Washington, D.C. 20420.)

1. "Diet and Dental Health." 17 min., 16 mm., optional color slides. Title No. 8-928. 8D-250
2. "Dental Floss." 16 1/2 min., optional color slides. Title No. 6-803. 8D-164
3. "Self Examination for Oral Disease." 15 min., 16 mm. 1979. Title No. 6-2408 (D-79-337)
4. "Preventive Dentistry for the Handicapped Patient." 16 1/2 min., 16 mm. Title No. 8-2397 (D-78-329)

B. Books

1. Katz, McDonald and Stookey. *Preventive Dentistry in Action.* 2nd ed. New Jersey: DCP Publishing Co., 1976.
2. Moss, S.J. *Preventive Dentistry.* New York: Medcom Publishing Co., 1972.
3. *Clean Teeth Brighten Your Smile.* Minneapolis: University of Minnesota Press, 1971.

PATIENT EDUCATION
UNIT I

INFORMATION SHEET

I. Terms and definitions

- A. Patient education--Treating causes of disease before treating result of disease
- B. Control program--Procedure by which patients are taught to control disease in their mouth before it becomes known

  (NOTE: When instructing patients, be sure to adjust your terminology for different age groups.)
- C. Dexterity--Skill and ease of using hands
- D. Oral hygiene--Health as applied to the mouth
- E. Disclosing tablet--Chewable red tablet used to locate plaque in the oral cavity
- F. Modified Snyder test--Method of determining amount of acids formed in a carbohydrate medium by mouth organisms
- G. Incubate--To maintain under controlled conditions for the development of a reaction

II. Basic facts about plaque

- A. Is sticky and hard to remove
- B. Cannot be seen (transparent)
- C. Is harmless if disorganized or broken up
- D. Forms daily

  (NOTE: Plaque must be removed every twenty-four hours.)
- E. Must be attached to a hard surface to do harm
- F. Forms and lives on sucrose (sugar)

  (NOTE: Acid is produced for twenty minutes after each intake of sugar.)
- G. Forms in hard-to-reach, protected areas

  Example: Interproximal gingival crevices

INFORMATION SHEET

III. Methods of eliminating plaque

- A. Withholding of sucrose
- B. Applying removal techniques daily

  Examples: Flossing, brushing

IV. Methods of lessening susceptibility to plaque

- A. Applications of fluorides and sealants

  Example: Painting teeth with fluorides and sealants

- B. Intake of systemic fluorides

  (NOTE: The intake of fluorides through fluoridated water is sixty percent effective in preventing dental decay.)

- C. Eating balanced diet

V. Parts of a basic patient education program

- A. Instruction in oral hygiene (Assignment Sheets #3 and #4)

  Examples: Flossing, brushing

- B. Assisting with use of basic four food groups (Assignment Sheet #1)
- C. Encouraging control of sucrose in diet (Assignment Sheet #2)

VI. Steps in teaching patient education

- A. Avoid giving patient too much information in one session
- B. Create active participation of patient
- C. Use immediate feedback

  Examples: "Yes," "I understand," "Oh, that is the purpose. . ."

- D. Proceed at pace appropriate for patient

  (NOTE: Some people have more manipulative skills in their fingers than others and will learn to handle floss much faster than others.)

VII. Differences between stannous and sodium fluorides

- A. Stannous fluoride--Must be prepared just before application
- B. Sodium fluoride--May be stored for short period of time before use

PATIENT EDUCATION
UNIT I

ASSIGNMENT SHEET #1--SELECT FOODS TO MEET MINIMUM NUTRITIONAL NEEDS

NAME ______________________ SCORE ______________________

One of the most helpful resources for nutritional food planning or selection is the Basic Four Food Group Guide. This guide divides foods into four groups and recommends number of servings that should be eaten per day from each group.

If foods are consumed in quantities recommended by this guide, a large percentage of the Recommended Dietary Allowances (R.D.A.) will be met.

Before attempting to provide dietary counseling for the patient, it is essential that you thoroughly understand what you are talking about and that you plan your own diet carefully.

Four Basic Foods Chart

		SUGGESTED DAILY AMOUNTS				
		Child	Adolescent			Adult
Food Group	Portion Size		Small Frame	Medium Frame	Large Frame	
Milk	8 oz. milk	3-4 servings	2-3 servings	3-4 servings	4-5 servings	2 servings
Meat, fish, eggs, poultry	3-4 oz.	2 or more servings (2-3 oz. each)	2 servings (3-4 oz. each)	2 servings (4-5 oz. each)	2 servings (5-6 oz. each)	2 or more servings (3-4 oz. each)
Fruits and vegetables (Including citrus fruits, dark green and yellow vegetables)	1 medium piece fresh or 1/2 c. cooked	4 or more servings	4-5 servings	5-6 servings	6 or more servings	4 or more servings
Breads and cereals (Must be whole grain or have whole grain supplement-vitamins)	1 slice bread or 1/2 c.-3/4 c. cereal	4 or more servings	4-5 servings	5-6 servings	6-8 servings	4 or more servings

ASSIGNMENT SHEET #1

Each person in your family has had the following foods to eat today:

BREAKFAST

Orange juice
Toast and jelly

LUNCH

Hot dog
(with chili)
Potato chips
Candy bar
Soda pop

The following foods are available on the cafeteria line. Using the Four Basic Foods Chart and suggested daily amounts, select dinner for your family.

SALADS

Chef salad
Orange gelatin, fruit, and vegetable salad
Bean salad
Strawberry-banana salad
Cucumber vegetable salad
Marinated vegetable salad
Pea salad
Mushroom salad
Cottage cheese

MEATS

Baked codfish
Fried halibut
Roast beef and natural gravy
Chicken fried steak and white gravy
Fried chicken
Salisbury steak
Pork chops, fried

HOT VEGETABLES

Mashed potatoes
Candied sweet potatoes
Fried okra
Corn
Green beans
Spinach
Beets
Asparagus
Broccoli

BREAD PRODUCTS

Hot rolls
Corn bread
White bread
Blueberry muffins
Garlic bread
Rye bread
Crackers

ASSIGNMENT SHEET #1

BEVERAGES

- Water
- Milk
- Tea
- Coffee
- Carbonated beverages
- Hot chocolate

MISC.

- Sugar
- Butter
- Artificial sweetener

DESSERTS

- Bread pudding
- Custard pudding
- Strawberry shortcake
- Devil's food cake
- Pecan pie
- Peach pie
- Apple pie
- Chocolate pie
- Banana pie
- Pumpkin pie
- Custard pie
- Apple cobbler
- Apple dumplings

In the spaces provided below, write your selections for each of the following people. Keep in mind what they have already eaten, and what is needed to insure total daily intake of the four basic food groups.

1. Jerry, your brother, is a 16-year-old junior in high school. It is football season and he is a starting player on the football team.

____

____

____

____

____

2. Kathy, your sister, is 23 and in her 8th month of pregnancy. She teaches full-time at the local elementary school.

____

____

____

____

____

ASSIGNMENT SHEET #1

3. Tom, your grandfather, is 70 years old and fairly active. He has characteristics of his age group. He also has problem teeth, and poor digestion and appetite. He needs to avoid many high-calorie foods.

4. Michelle, your niece, is four years old and very active. She is going through a slow period of growth development. She enjoys finger foods and does not like milk.

5. George, your father, is 45 years old. He is having a little trouble adjusting to a new "desk" job, and is gaining weight due to lack of exercise.

6. Yourself.

ASSIGNMENT SHEET #1

PART III

1. What problems did you have when selecting the meals for your family in Part II of this assignment?

____

____

____

____

____

2. What conclusions can you draw from this assignment?

____

____

____

PATIENT EDUCATION
UNIT I

ASSIGNMENT SHEET #2--ELIMINATE EXCESS SUCROSE IN DIET

NAME________________________________ SCORE______________________

The importance of a balanced diet with adequate protein is one secret of eliminating excess sucrose. A diet weak in basic food groups can cause a person to snack on the wrong foods, particularly sucrose-rich foods.

Example: A person who has only orange juice for breakfast will have a fall in blood sugar by midmorning which will cause him or her to seek a quick source of energy, such as soda pop and candy. An adequate diet should eliminate a craving for sweets. Reducing sucrose intake is difficult for families who have been dependent on sucrose to raise their energy level

PART I

A. Make a chart and record EVERYTHING you eat or drink for five days. This includes snacks, candies, and gum, as well as regular meals. (See the sample chart below.)

B. The following should be included:

1. Kind of food
2. Approximate amount in household measures, 1 cup (8 oz.)
3. Preparation (raw, cooked, fried, etc.)
4. Order in which foods are eaten at the meal
5. Number of teaspoons of sugar or sugar products eaten as well as milk added to cereal, beverages or other foods

Example: FIRST DAY

	Food	Amount	How cooked
Breakfast			
Snack			
Lunch			
Snack			
Dinner			
Snack			

ASSIGNMENT SHEET #2

PART II-EVALUATE YOUR SUCROSE INTAKE

A. METHOD I

1. Circle each food or drink containing sugar in red

   (NOTE: Retentive sweets linger in the mouth longer and are more likely to adhere to teeth; liquids do help keep sugars from sticking to teeth.)

2. Total the number of times sugared foods are eaten and multiply that by 20 minutes to determine the number of minutes teeth are being bathed in acid

   (NOTE: This is based on the fact that each time bacteria consume sugar, they produce acid for 20 minutes. Because of this, the frequency of sugar intake is even more important than the total amount of sugar consumed.)

B. METHOD II--Place a sugar cube by each circled food or drink. One sugar cube would equal one teaspoon

Examples: Iced tea with three teaspoons of sugar-three sugar cubes
Cola-if sugared, is equal to seven sugar cubes

PART III-ELIMINATE EXCESS SUCROSE

Sucrose-heavy foods require certain nutrients in order to be metabolized, and since they do not contribute any nutrients themselves, they rob the body of its nutrients. Therefore, a high sucrose intake causes a depletion of vitamins and minerals necessary for healthy tissues, besides causing bacterial plaque.

After evaluation of your diet, did you feel your diet was too high in sucrose? Yes________
No______

What would you substitute in your diet for sugared drinks?

Example: Cola--sugar-free drink or tomato juice

____

What could you substitute for between-meal snacks?

Example: Candy bar--apple, cheese

____

ASSIGNMENT SHEET #2

How could you substitute for quality of food intake?

Example: T.V. dinners--plan time to incorporate the basic four food groups

---

Do you feel you have enough control over your own diet to be able to teach your patients to use a low-sucrose diet? Yes______ No______

(NOTE: If not, practice evaluating a classmate's diet.)

PATIENT EDUCATION
UNIT I

ASSIGNMENT SHEET #3--COMPARE ORAL CLEANSING PRODUCTS

NAME______________________________ SCORE________________

There are many oral cleansing products on the market today. As a dental assistant you should be aware of these because you will be expected to answer many questions the patient will ask in the dental office.

Research five products and fill in the blanks below. Be sure to include in your research toothpaste, types of brushes, mouthwashes and oral irrigating devices.

NAME	PURPOSE OR CLAIM	COST	COMMENTS
1.			
2.			
3.			
4.			
5.			

Share your findings with the class.

PATIENT EDUCATION
UNIT I

ASSIGNMENT SHEET #4--FORM RESPONSES TO QUESTIONS MOST FREQUENTLY ASKED BY PATIENTS

NAME______________________________ SCORE_______________

As a dental assistant you must feel and express interest in the patient. As a result, you will be asked many questions.

Prepare yourself to respond orally or in writing to the following questions. Use your textbook or material obtained in this unit to assist you. Use a classmate to practice answering the questions below.

1. Is there a "best" time of day to clean your teeth?

2. Does mouthwash aid in killing bacteria?

3. If I brush after each meal, how can I still have plaque?

4. Won't a water irrigator clean between my teeth as well as floss?

5. Why does it take so many visits to learn to clean teeth properly?

ASSIGNMENT SHEET #4

6. When you remove bacteria from one tooth, does it matter if it gets on another tooth?

7. Won't prevention of oral disease put your dentist out of business?

PATIENT EDUCATION
UNIT I

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

It is almost impossible to select foods for one meal that will meet the Basic Four Food Group requirements if one has not eaten well at other meals.

Assignment Sheet #4

(NOTE: This assignment sheet should be evaluated to the teacher's satisfaction. These are only suggested answers.)

1. Yes, the most effective time is after the evening meal or before going to bed. It is best to establish a certain time each day to develop a habit of cleaning. Cleaning at the time leaves the mouth free of plaque for six to eight hours, since plaque usually won't form very fast without sugar.

2. Mouthwash only masks the odor of bacterial disease.

   Example: Applying perfume without a bath. Plaque has a protective coating that shields bacteria. Disorganized bacteria will live for an hour in mouthwash

3. The brush can only reach the surface areas of the teeth; that is why we use the floss: to get in between the teeth.

4. Research has proven that water irrigators cannot remove plaque, but do remove plaque's products. Within twenty minutes, however, new products have formed. We have to break up the chain of bacteria to keep the plaque from forming.

   Example: Breaking up a chain of ants

5. We have to get to know our hard-to-manage areas. Learning to clean our teeth is simple, but not easy to accomplish.

   Example: You can read instructions on learning to skate, but you cannot proceed to skate the first day without aid

6. No, because bacteria lose their potential to cause disease once they are disorganized. It takes twenty-four hours for bacteria to reorganize and become a destructive colony.

7. Yes, but not for many years. Gingival disease and dental caries are so prevalent it would take many years to teach and repair damage already done.

PATIENT EDUCATION
UNIT I

JOB SHEET #1--INSTRUCT PATIENT IN ORAL HYGIENE (FIRST VISIT)

I. Materials

- A. Microscope
- B. Disclosing tablets
- C. Petroleum jelly
- D. Explorer
- E. Glass slides
- F. Mouthwash
- G. Dental floss
- H. Projector and film on plaque control
- I. Instructional pamphlets to be given to patient

II. Procedure

A. Show film describing nature of plaque, what it does, and how it can be effectively removed

B. Lead a discussion with patient about film and his or her lifestyle

Examples: Past dental experiences, food habits, interest in oral health

C. Ask patient to chew disclosing tablet

(NOTE: Apply petroleum jelly to lips to prevent staining. When patient is nearly through chewing, remaining tablet may be either spit out or swallowed.)

D. Hand patient hand mirror and ask the patient to find the plaque

E. Assist patient in locating hard-to-see areas

F. Review the nature of plaque with patient

(NOTE: Be careful at this point to allow patient to ask questions.)

JOB SHEET #1

G. Explain to patient that you are going to remove some plaque for viewing under the microscope.

(NOTE: Examination will show the difference between organized and disorganized bacteria.)

H. Use the explorer to remove plaque from the sulclar area of the maxillary second molar

I. Place plaque on a glass slide in a drop of mouthwash and break plaque apart

(NOTE: Work in front of patient, explaining that only organized plaque is harmful.)

J. Adjust microscope to 800 power

(NOTE: This is focused so that half of the field is seen as disorganized moving bacteria and the other half as an organized mass.)

K. Invite patient to view bacteria

L. Explain to patient that bacteria can organize so densely that they seal out saliva, which breaks down bacteria

M. Point out the full strength mouthwash used in slide preparation had no effect on killing bacteria

(NOTE: Do not attempt to identify bacteria to patient.)

N. Explain that research has proven the most effective way to remove disorganized bacteria is with the use of unwaxed dental floss every 24 hours

O. Explain that the ability to use dental floss correctly is a skill that requires practice

Example: Riding a bicycle is a skill that requires practice

P. Tell patient after learning this skill it is easily done and highly effective

Q. Demonstrate flossing technique using a study model

R. Have patient return demonstration using only half of the mouth

S. Compliment patient

T. Clean all of patient's mouth

U. Give patient literature on flossing and brushing

JOB SHEET #1

V. Ask patient not to try flossing until after the second or third visit, as damage can be done to the gums until the skill is mastered

W. Record all findings and procedures on patient's chart

PATIENT EDUCATION
UNIT I

JOB SHEET #2--INSTRUCT PATIENT IN ORAL HYGIENE
(SECOND VISIT)

I. Materials

  A. Projector and film on plaque control

  B. Disclosing tablets

  C. Dental floss

II. Procedure

  A. Show film again of nature of plaque and what it does

  B. Show film of a clean healthy mouth

  C. Lead a discussion with patient about film

  D. Ask patient to chew disclosing tablet

  (NOTE: Apply petroleum jelly to lips to prevent staining. When patient is nearly through chewing, remaining tablet may be either spit out or swallowed.)

  E. Give patient hand mirror and ask patient to find the plaque by him or herself

  F. Assist patient in locating hard-to-see areas

  G. Review the nature of plaque with patient

  (NOTE: Be careful at this point to allow patient to ask questions.)

  H. Continue to teach and repeat important facts

  I. Have patient practice flossing, starting at the same place each time

  J. Correct patient's technique, guide and make suggestions

  K. Encourage, compliment and be supportive

  L. Ask the patient not to floss again until return visit

  M. Instruct patient to rinse mouth with saline solution if soreness or bleeding occurs

  N. Record patient's progress on chart

PATIENT EDUCATION
UNIT I

JOB SHEET #3--INSTRUCT PATIENT IN ORAL HYGIENE (THIRD VISIT)

I. Materials

- A. Soft toothbrush
- B. Floss threader
- C. Dental floss

II. Procedure

- A. Instruct patient to brush teeth using modified Bass technique
- B. Explain to patient if he or she doesn't have time to both floss and brush, that flossing is more important

  (NOTE: You are trying to change the patient's thinking that brushing faithfully is all one has to do.)

  Example: Dr. Robert Barkley points out that the toothbrush is important in cleansing the mouth, but that you can brush after every bite and still get decay
- C. Place special emphasis on the surface near the gum line
- D. Compliment and encourage patient
- E. Observe patient flossing teeth
- F. Check all areas for plaque
- G. Assist with mistakes immediately
- H. Compliment patient on progress
- I. Explain that the most effective time to floss is before brushing, as most of the plaque is removed by flossing
- J. Suggest that patient use disclosing tablet to see if any areas are missed

  (NOTE: Any patients with bridges or splinted joints in their mouths should be given a floss threader to assist them with these areas.)

JOB SHEET #3

K. Instruct patient to thread floss threader as if threading a needle (Figure 1)

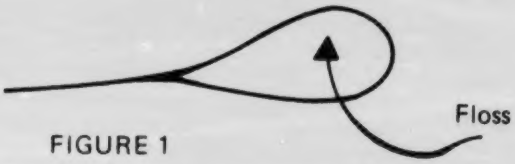


FIGURE 1

Used with permission of John O. Butler Company U.S. PAT. No. 3,929,144

L. Assist patient with putting threader under bridge and moving thread back and forth in a push-and-pull motion (Figure 2)

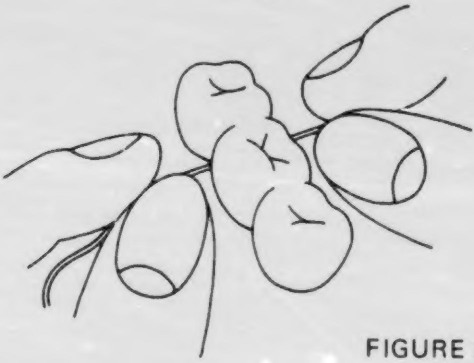


FIGURE 2

Used with permission of Johnson & Johnson Dental Products Company

M. Give the patient floss and disclosing tablets to take home

N. Ask patient to floss that night

PATIENT EDUCATION
UNIT I

JOB SHEET #4--INSTRUCT PATIENT IN ORAL HYGIENE (FOURTH AND FIFTH VISITS)

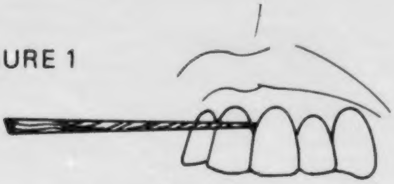
I. Materials

A. Mouth mirror

B. Perio-aids

Examples: Floss threader, gum stimulator (Figure 1)

FIGURE 1



Balsa Wood Stimulator

II. Procedure for fourth visit

A. Ask patient if he or she has had any problems flossing at home

(NOTE: If patient has had any problems, continue teaching and assisting.)

B. If patient has been having difficulty flossing, ask if he or she can think of an additional method to remove the plaque

(NOTE: Often when patients are encouraged to use a problem-solving approach, they will take it on their own to find a method that works.)

C. Introduce the perio-aid if patient is having problems cleaning the gum line in the back

D. Ask patient to hold it like a pencil, with the little finger braced on the chin, and use a scraping motion on the gum line, going back and forth three or four times

E. Hand patient a mouth mirror to see the difficult areas

(NOTE: The patient's flossing and brushing ability should be adequate by this visit.)

JOB SHEET #4

F. Assist the patient in attaining dexterity and speed

G. Ask doctor to examine the patient's mouth to see improvement, now that he or she has learned to control plaque

H. Dismiss patient for one week to clean mouth alone

I. Instruct patient to use disclosing tablet after each cleansing to reveal any areas missed consistently

J. Ask patient to pick a convenient time of day to clean teeth, and establish a habit at the same time of day

III. Procedure for fifth visit

A. Have patient chew a disclosing tablet

B. Observe patient flossing and brushing

C. Encourage and compliment patient

D. Ask patient to return in one month for observation

PATIENT EDUCATION
UNIT I

JOB SHEET #5--PREPARE A MODIFIED SNYDER TEST

(NOTE: The modified Snyder test is a colorimetric method for determining the amount of acids formed in a carbohydrate medium by mouth organisms. The indicator is bromcresol green, which changes from blue-green to yellow in the presence of acids. This test is a practical way to monitor patient motivation and to measure the effectiveness of the caries control program.)

I. Equipment

  A. Test tube

  B. Snyder agar medium

II. Procedure

  A. Fill tube with glucose agar medium to level indicated on test tube line

  B. Obtain saliva for tube using one of the procedures below:

    1. Have patient drool unstimulated saliva into a tube of Snyder medium, just covering surface of medium; cap tube

    2. Rub a cotton swab on facial surfaces or swab under tongue

      a. Stab swab into agar to depth just under surface

      b. Leave swab in medium

      c. Break off end of stick and cap tube

  C. Incubate tube at 37° C

  (NOTE: The production of acid is indicated by bromcresol green, which changes from blue-green at pH 4.0 or lower. Yellow indicates a positive test.)

  D. Record color change for 72 hours (three days)

  (NOTE: Although changes are not likely to be seen until 72 hours have passed, check tube at 24 and 48 hours.)

JOB SHEET #5

Results after incubation for:

	24 HOURS	48 HOURS	72 HOURS
MARKED			
MODERATE			
SLIGHT			
NEGATIVE			

E. Significance of the results is as follows:

Example:

CARIES ACTIVITY	RESULT AFTER INCUBATION FOR:		
	24 HOURS	48 HOURS	72 HOURS
MARKED	Positive		
MODERATE	Negative	Positive	
SLIGHT	Negative	Negative	Positive
NEGATIVE	Negative	Negative	Negative

F. Interpretation: Both speed and volume of acid production are indicated and serve as a point of reference in comparison testing

1. "Improved" - slower or less color change when compared with previous results
2. "Worse" - faster or more pronounced color change when compared with previous results

PATIENT EDUCATION
UNIT I

TEST

NAME______________________________ SCORE________________

1. Match terms associated with patient education to their definitions. Write the correct numbers in the blanks provided.

______a. Procedure by which patients are taught to control disease in their mouth before it becomes known

______b. Method of determining amount of acids formed in a carbohydrate medium by mouth organisms

______c. Skill and ease of using hands

______d. Treating causes of disease before treating result of disease

______e. Health as applied to the mouth

______f. To maintain under controlled conditions for the development of a reaction

______g. Chewable red tablet used to locate plaque in oral cavity

1. Patient education
2. Control program
3. Dexterity
4. Oral hygiene
5. Disclosing tablet
6. Modified Snyder test
7. Incubate

2. Select from the list below basic facts about plaque. Mark each correct response with an "X."

______a. Forms daily

______b. Cannot be seen (transparent)

______c. Is a type of fungus

______d. Is sticky and hard to remove

______e. Forms in hard-to-reach, protected areas

______f. Requires professional removal

______g. Can organize on the lips

______h. Is harmless if disorganized or broken up

______i. Must be attached to a hard surface to do harm

3. List two methods of eliminating plaque.

a. ______________________________

b. ______________________________

4. Select from the list below methods of lessening susceptibility to plaque. Mark each correct answer with an "X."

______a. Using mouthwash

______b. Eating carbohydrate foods

______c. Eating balanced diet

______d. Intake of systemic fluoride

______e. Applications of fluoride and sealants

5. State parts of a basic patient education program.

a. ______________________________

b. ______________________________

c. ______________________________

6. Select from the list below steps in teaching patient education. Mark each correct response with an "X."

______a. Shame patient into flossing teeth

______b. Use immediate feedback

______c. Create active participation of patient

______d. Observe patient flossing and brushing occasionally

______e. Reward children with candy

______f. Avoid giving patient too much information in one session

______g. Proceed at pace appropriate for patient

7. State the difference between stannous and sodium fluorides.

a. Stannous fluoride--______________________________

____

b. Sodium fluoride--______________________________

____

8. Select foods to meet minimum nutritional needs.
9. Eliminate excess sucrose in diet.
10. Compare oral cleansing products.
11. Form responses to questions most frequently asked by patients.
12. Demonstrate the ability to:
    a. Instruct patient in oral hygiene (first visit).
    b. Instruct patient in oral hygiene (second visit).
    c. Instruct patient in oral hygiene (third visit).
    d. Instruct patient in oral hygiene (fourth and fifth visits).
    e. Prepare a modified Snyder test.

    (NOTE: If activities 8-12 have not been finished before the test, ask your instructor when they should be completed.)

PATIENT EDUCATION
UNIT I

ANSWERS TO TEST

1. a. 2
   b. 6
   c. 3
   d. 1
   e. 4
   f. 7
   g. 5
2. a, b, d, e, h, i
3. a. Withholding of sucrose
   b. Applying removal techniques daily
4. c, d, e
5. a. Instruction in oral hygiene
   b. Assisting with use of basic four food groups
   c. Encouraging control of sucrose in diet
6. b, c, f, g
7. a. Must be prepared just before application
   b. May be stored for a short period of time before use
8. Evaluated to satisfaction of instructor
9. Evaluated to satisfaction of instructor
10. Evaluated to satisfaction of instructor
11. Evaluated to satisfaction of instructor
12. Performance skills evaluated to satisfaction of instructor

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to assist the doctor during oral examination, diagnosis and treatment plan. This knowledge will be evidenced by completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with chairside assistance to the correct definitions.
2. Distinguish between duties of the dental assistant during patient's first and second visits.
3. Select from a list information needed for appointing a patient.
4. List basic setup items needed for nonoperative procedures.
5. Select from a list rules of conduct in the operatory.
6. Match classifications of cavities to their correct descriptions.
7. Distinguish between other classifications of cavities.
8. Identify landmarks of cavity preparation.
9. Match types of cavity preparation to their correct descriptions.
10. Describe the long axis and the axial wall of a tooth.
11. Distinguish between types of materials used in burs, mounted points, and wheels.
12. Match types of burs to their correct uses.
13. Select from a list designs of bur shanks.
14. Name examples of types of equipment used in a dental office.
15. Distinguish between types of handpieces and their uses.
16. Distinguish between types of handpiece angles.
17. Record medical and dental history of patient.

18. Chart teeth.
19. Appoint patients in appointment book.
20. Record medical and dental history of patient.
21. Evaluate office maintenance procedures.
22. Demonstrate the ability to:
    a. Position patient, dentist, and assistant for four-handed operative dentistry.
    b. Exchange and retrieve instruments.
    c. Place bur in handpiece.
    d. Use evacuator, water, and air.
    e. Trim model for case presentation.

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide student with objective sheet.

  B. Provide student with information, assignment, and job sheets.

  C. Order film.

  D. Make transparencies.

  E. Discuss unit and specific objectives.

  F. Assist students with Assignment Sheet #3.

    1. Use appointment book page provided in unit to have students practice making appointments.

       Example: Have students invite drafting class or business office class to come in and have students appoint them to take impression for study models of mouths

       (NOTE: This gives student experience in working with someone outside of class.)

    2. Demonstrate marking off appointment book for holidays, meetings, and days the dentist will be out of the office.

    3. Lead a discussion on best time of day for appointing different patients.

       Examples: Pre-school children in morning, handicapped people in the morning

    4. Instruct students not to appoint same type of operative procedures one after the other

       Examples: Prophy 9:00 o'clock, prophy 10:00 o'clock, prophy 11:00 o'clock

  G. Use Job Sheet #1 from Radiation Safety unit of instruction to aid in teaching complete diagnosis and treatment plan.

  H. Lead a discussion on emergency patients.

     Examples: How they are handled, time involvement in schedule

  I. Lead a discussion on care of the dental units. Explain that most lounge chairs are self-sealed.

1. Demonstrate care of the conventional type chair.
2. Stress the importance of reading manufacturers' instructions on care of equipment, as each unit requires different care.

J. Use attached sheet to teach student care of handpieces.

K. Caution student about contamination possibilities of mercury, and lead a disussion on safety while using mercury.

L. Lead a discussion on safety tips while using the model trimmer (Job Sheet #5). Use a piece of chalk to grind at the trimmer blade to show student distance to maintain from cutting blade.

M. Demonstrate cleaning and care of model trimmer.

Example: Running water through machine after use

N. Demonstrate types of grasps used for instruments (Job Sheet #2.)

(NOTE: Practice instrument exchange until student has mastered technique.)

O. Have student practice placing and removing burs from latch-type and friction-grip angles.

P. Assist student with Assignment Sheets #1-4.

Q. Provide student with equipment for Job Sheets #1-4.

R. Discuss and demonstrate procedures for Job Sheets #1-5.

S. Explain landmarks in objective VIII.

Examples:
Enamel wall--Portion of cavity that is enamel
Dentinoenamel union--Junction of enamel and dentin
Covosurface margin--Line formed by junction of cavity wall and external surface
Angle--Where two surfaces meet

T. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters:

1. TM 1--Cavity Classifications
2. TM 2--Cavity Preparation
3. TM 3--Burs Used for Restorations

4. TM 4--Types of Handpieces-Latch
5. TM 5--Types of Handpieces-Friction Grip

D. Assignment sheets

1. Assignment Sheet #1--Chart Teeth
2. Assignment Sheet #2--Record Medical and Dental History of Patient
3. Assignment Sheet #3--Appoint Patients In Appointment Book
4. Assignment Sheet #4--Evaluate Office Maintenance Procedures

E. Job sheets

1. Job Sheet #1--Position Patient, Dentist and Assistant For Four-Handed Operative Dentistry
2. Job Sheet #2--Exchange and Retrieve Instruments
3. Job Sheet #3--Place Bur in Handpiece
4. Job Sheet #4--Use Evacuator, Water, and Air
5. Job Sheet #5--Trim Model for Case Presentation

III. Unit references:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia, Pennsylvania: W. B. Saunders Co., 1976.

B. Peterson, Shailer, ed. *The Dentist and His Assistant.* 3rd ed. St. Louis: C.V. Mosby Co., 1972.

C. Anderson, Pauline C. *The Dental Assistant.* Albany, New York: Delmar Publishers/Litton Educational Publishing, Inc., 1974.

D. Ehrlich, Ann. *Cavity Classification.* Champaign: The Colwell Co., 1974.

IV. Films:

A. "Instrument Transfer." 8 min., rental charge $3.00, order #DTA 306.

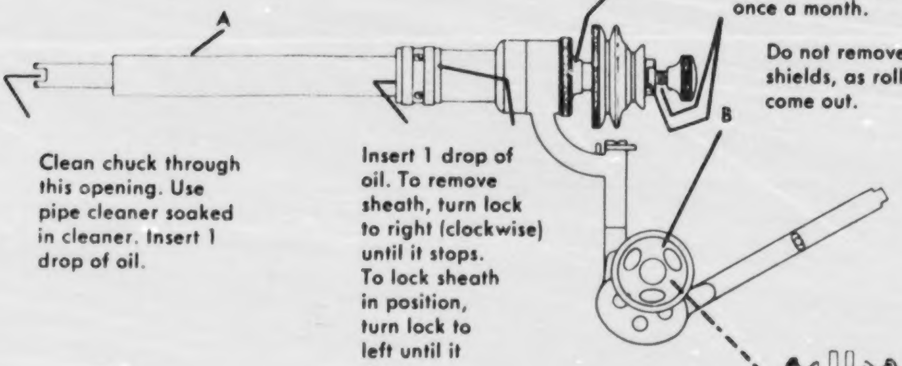
B. "Instrument Transfer." 61 min., Rental charge $4.00, order #SL81.

(NOTE: The above films may be ordered from American Dental Association, Bureau of Audio Visual Service, 211 East Chicago Avenue, Chicago, Illinois 60611.)

V. Slide/tape presentation--"A Clinical Classification of Caries." 18 minutes, 1974. Available from University of Maryland School of Dentistry, 666 West Baltimore Street, Baltimore, Maryland 21202 Att: Audio-Visual Dept.

CARE OF HANDPIECES

Clean and lubricate twice a week.



Clean outside of sheath support, and spindle with brush and cleaner; then apply 2 drops of oil at "A."

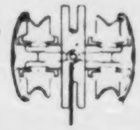
Unscrew thumb nut 1 turn; insert only 2 drops of oil through the oil hole, and then tighten nut securely. Do not use pliers.

Put 1 drop of oil on threads once a month.

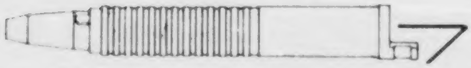
Do not remove pulley shields, as rollers may come out.

Clean chuck through this opening. Use pipe cleaner soaked in cleaner. Insert 1 drop of oil.

Insert 1 drop of oil. To remove sheath, turn lock to right (clockwise) until it stops. To lock sheath in position, turn lock to left until it stops.



Place 2 drops of oil through hole in the screw.

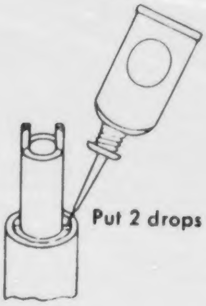


Clean the inside of the sheath with a brush dipped in cleaner.

Wrench for removing chuck tightening rod at "B."

Chuck push-out rod.

Nylon brush for cleaning handpiece sheath.



Put 2 drops of oil here.

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INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Diagnosis--Act of determining one disease from another

B. Prognosis--Opinion about condition and chances of recovery

C. Cavity preparation--Surgical operation removing caries and hard tissue in order to shape tooth for restoration

D. Cavity margin--Junction of cavity wall and enamel surface of tooth

E. Cavity floor--Pertains to pulpal and gingival wall

F. Undercut--Localized channel within a cavity preparation

G. Linear--Straight or involving a single dimension

Example: Straight line or wall

H. Margin--Boundary line or border of surface of tooth or cavity

I. Marginal ridge--Elevation of enamel on surface of a tooth

J. Pulpal horn--Small projection of pulp tissue which lies directly under a cusp or lobe of a tooth

K. Embrasure--Opening with sloping sides formed by adjacent surfaces of teeth

L. Contour--Outline of a curve

M. Contra-angle--Attachment for straight handpiece; enables dentist to reach areas not readily accessible using straight handpiece

N. Carborundum--Extremely hard abrasive used to polish restorations

(NOTE: Carborundum is pronounced kar-bo-rundum.)

O. Mandrel--Shaft which holds a rotating instrument

P. Restoration--Process of replacing whole tooth or part of tooth

Q. Matrix band--Device that temporarily replaces the missing wall of a tooth during the restoration procedure

INFORMATION SHEET

II. Duties of dental assistant during patient's first and second visits

- A. First visit (Assignment Sheet #1)
    1. Obtain patient's medical and dental history
    2. Prepare patient for oral examination
    3. Take dental radiographs
    4. Take impressions of the dental arches
    5. Chart patient's oral diagnosis (Assignment Sheet #2)
    6. Appoint patient for second visit (Assignment Sheet #3)
- B. Second visit

    (NOTE: Have patient's records, study model, viewbox and X-rays in readiness for the dentist.)

    1. Assist with case presentation
    2. Instruct patient in caries control program
    3. Assist with recommended treatment
    4. Assist with financial arrangements

III. Information needed for appointing patient

- A. Patient's full name
- B. Telephone number

    (NOTE: Be sure to get the telephone number where the patient may be reached in case of a change in appointment or an emergency.)

- C. Time of appointment
- D. Length of appointment
- E. Nature of work to be done

IV. Basic setup items needed for non-operative procedures

- A. Mouth mirror
- B. Explorer
- C. Cotton pliers

INFORMATION SHEET

V. Rules of conduct in the operatory

- A. Use conversation that deals with patient; don't discuss your own problems

  Examples: Work being performed, patient education

- B. Show interest in patient

  (NOTE: Make notes on patient's chart of their children or a trip they are going to take to used for next visit to open conversation. The patient will be most impressed that you remembered.)

- C. Speak and refer to patient by name

  (NOTE: Never refer to patients as he or she.)

- D. Concentrate on job at hand

- E. Be sympathetic and comforting toward patient

  (NOTE: Always use a soft tone of voice. If a patient is nervous, a loud voice is very irritating.)

- F. Be pleasant but not familiar with patient

- G. Display a radiant personality

- H. Maintain a pleasant expression

  (NOTE: Any message to the doctor while working on a patient should be indicated in a note held out of the patient's line of vision, just behind the patient's head. Use this only for urgent, confidential messages.)

- I. Treat patient as you would treat a guest in your home

VI. Classifications of cavities (Transparency 1)

(NOTE: Dr. G. V. Black is known as the "grand old man of dentistry." One of his many outstanding contributions to the profession was his system of cavity classification developed around 1900. This system makes it possible to quickly and accurately describe the approximate location of a cavity.)

Examples: Area of the mouth, type of teeth involved
Type of instrument tray to be prepared

- A. Class I--Pit and fissure

  (NOTE: These do not occur on the smooth surfaces of a tooth.)

- B. Class II--Posterior interproximal

INFORMATION SHEET

C. Class III--Anterior interproximal

D. Class IV--Anterior interproximal, involving the incisal edge

E. Class V--Smooth surface

(NOTE: These cavities usually occur on the facial surfaces of the cuspids, bicuspids and molars.)

F. Class VI--Involves the abraded (worn) incisal edge or occlusal surface

(NOTE: Class VI includes destruction of the tooth surface due to wear, not decay. This 6th category was added to Dr. Black's original classifications but has not been widely accepted.)

VII. Other classifications of cavities

A. Simple--Involving one tooth surface only

B. Compound--Involving two tooth surfaces

C. Complex--Involving two or more surfaces of a tooth

VIII. Landmarks of cavity preparation (Transparency 2)

A. Cavity wall

B. Enamel wall

C. Dentin wall

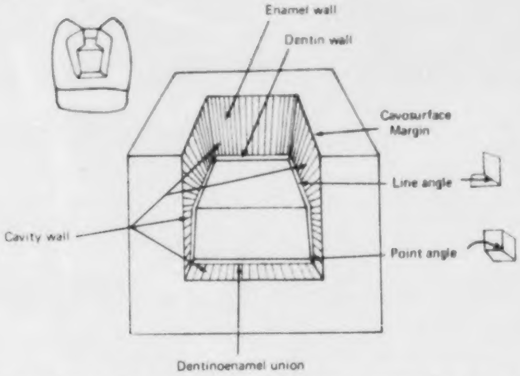
D. Cavosurface margin

E. Line angle

F. Point angle

INFORMATION SHEET

G. Dentinoenamel union


Enamel wall
Dentin wall
Cavosurface Margin
Line angle
Cavity wall
Point angle
Dentinoenamel union

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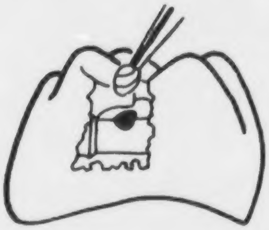
IX. Types of cavity preparations

A. Outline form--Curved shape and border of tooth surface using round bur

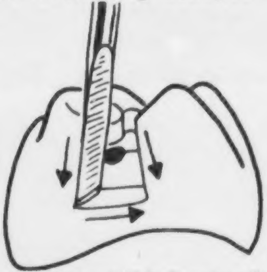


B. Resistant form--Form and thickness given tooth to prevent displacement or fracture

C. Retention form--Relationship of tooth surfaces (walls) to prevent dislodging of restoration

D. Convenience form--Gain access to cavity preparation for insertion and finishing restorative material

E. Removal of caries--Removing decayed and decalcified enamel and dentin



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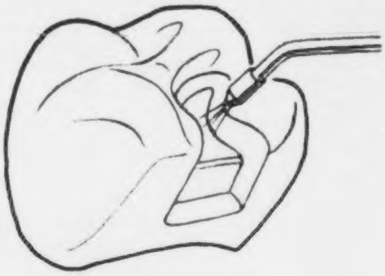
INFORMATION SHEET

F. Finishing enamel wall--Process of angling, beveling, and smoothing of wall



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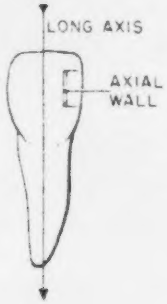
G. Cavity debridement--Performing "toilet" or cleasing of cavity

Example: Removal of decay and debris, drying of cavity

X. Long axis and axial wall of a tooth



A. Long axis (axial line)--Imaginary line through a tooth

(NOTE: The amount of deviation from the axial line differs in every individual and in every tooth of the individual.)

B. Axial wall (surface)--Parallel to the long axis

Example: Mesial, distal, facial, lingual surfaces are axial surfaces

XI. Types of material used in burs, mounted points, and wheels

A. Burs

1. Steel
2. Carbide steel
3. Diamond

INFORMATION SHEET

- B. Mounted points
  - 1. Carborundum
  - 2. Diamond
- C. Wheels
  - 1. Emery
  - 2. Silicone carbide
  - 3. Diamond chips

XII. Types of burs and their uses (Transparency 3)

A. Round burs--Used for opening the pits and fissures of Class I cavities and excavating decay from all teeth

(NOTE: Burs are available in many sizes. The choice of size depends upon the size of cavity, cavity location, and dentist.)

Examples: Size #1/2, 1, 2, 3, 4, 5, 6, 7, 8, 9

B. Inverted cone--Used in making slight undercuts or retention in cavity preparation of pulpal walls; also used for cleaning out decay

Examples: Size #33 1/2, 34, 35, 36, 37, 38, 39

C. Straight fissure cross cut--Used for cutting through fissures and for smoothing down pulpal and axial walls

Examples: #556, 557, 558, 559, 560, 561

D. Tapered fissure cross cut--Used in cavity preparation while forming the axial wall for alloy or inlay preparations

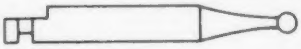
Examples: #700, 701, 702, 703, 704, 705, 707, 708

E. Straight fissure plain cut--Used for cutting through fissures and smoothing down pulpal and axial walls

Examples: #56, 57, 58, 59, 60, 61, 62, 63, 64

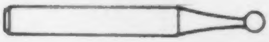
XIII. Designs of bur shanks

A. Latch type



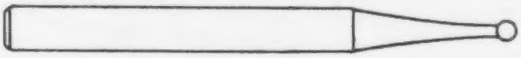
INFORMATION SHEET

B. Friction grip



C. Long shank

(NOTE: The long shank is usually used with a straight handpiece.)



XIV. Types of equipment used in a dental office

A. Chair
  1. Conventional
  2. Lounge

B. Oral evacuator
  1. Saliva ejector
  2. Suction tip

C. Cabinets
  1. Fixed
  2. Mobile

D. Operating stool
  1. Dentist
  2. Assistant

XV. Types of handpieces and their uses

A. Low speed: 6,000-7,000 rpm (revolutions per minute)
  1. Used for buffing and refining cavity preparation
  2. Used with abrasive stones and discs
  3. Used in performing prophy

INFORMATION SHEET

B. High speed: 6,000-100,000 rpm

    1. Used in cavity preparations
    2. Used in preparation of retention groves and bevels within a cavity

C. Ultra speed: 100,000-800,000 rpm

    1. Used for bulk removal of enamel and dentin in cavity preparation
    2. Used for developing cavity outline form
    3. Used for removal of old restorations

        Examples: Amalgams, inlays, onlays

XVI. Types of handpiece angles

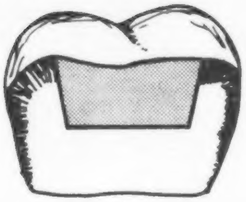
A. Latch (Transparency 4)

    1. Straight
    2. Contra-angle
    3. Right angle or prophy angle

B. Friction grip (Transparency 5)

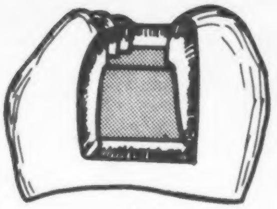
    1. Standard contra-angle
    2. Miniature head contra-angle
    3. Straight handpiece

Cavity Classifications



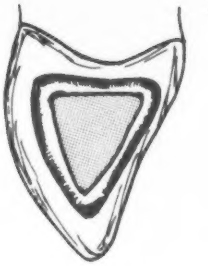
I

Pit and Fissures



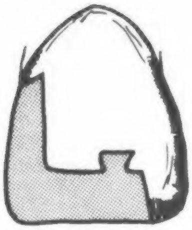
II

Proximals of bicuspids and molars



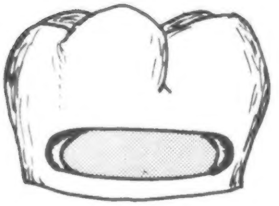
III

Proximals of incisors and cuspids not involving incisal angles



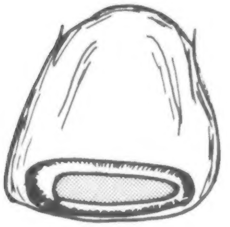
IV

Proximals of incisors and cuspids involving incisal angles



V

Gingival third of labial, buccal, or lingual surfaces of any teeth



VI

Incisal edges of anterior teeth

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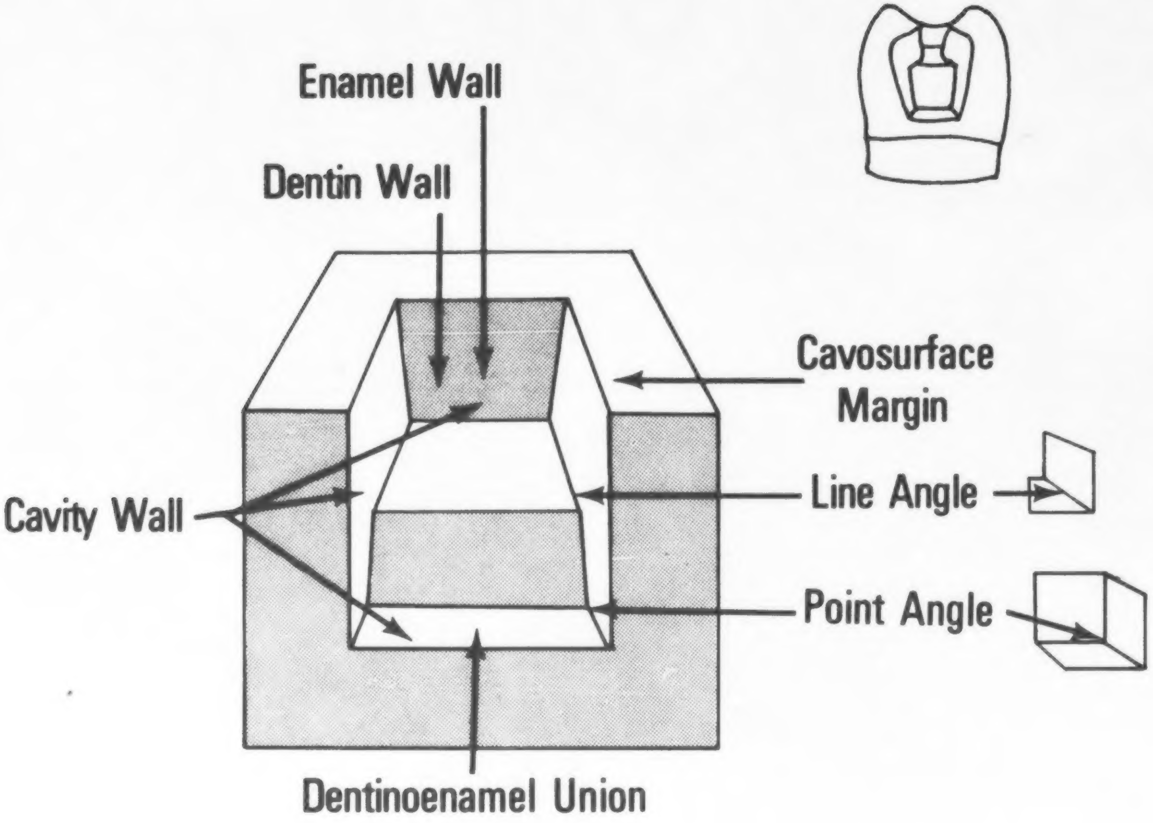
Cavity Preparation


Enamel Wall
Dentin Wall
Cavosurface Margin
Cavity Wall
Line Angle
Point Angle
Dentinoenamel Union

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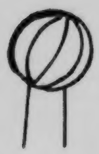
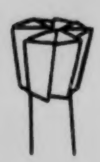
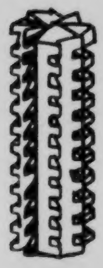
Burs Used for Restorations

Round

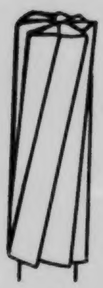


Inverted Cone

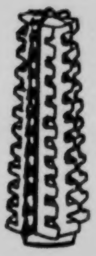




Straight Fissure
Crosscut



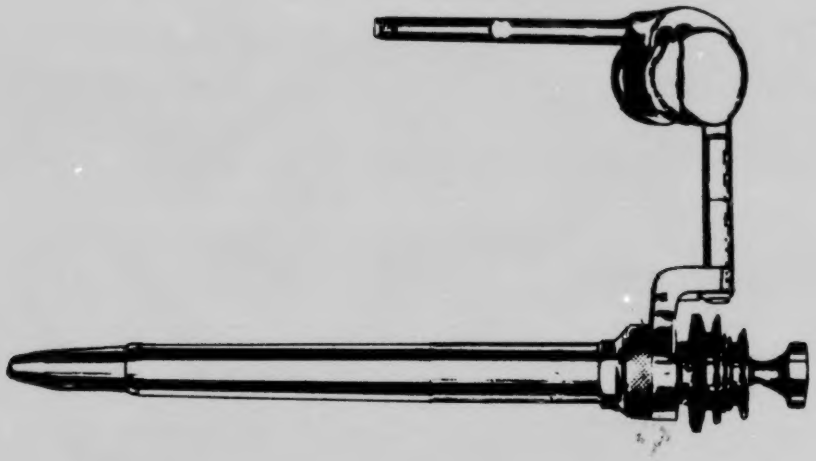
Straight Fissure
Plain Cut



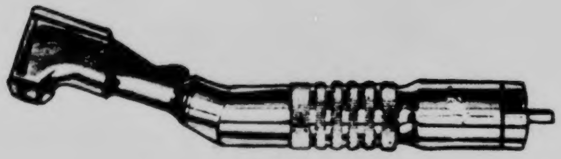
Tapered Fissure
Crosscut

Types of Handpieces

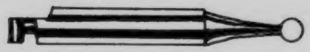
Latch



Handpiece



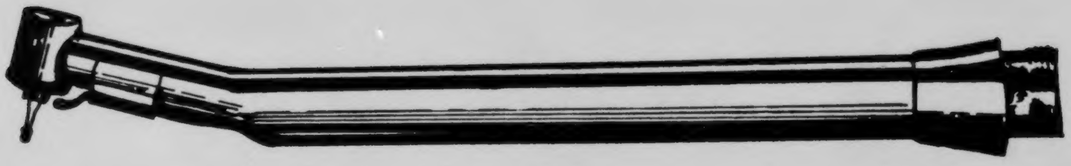
Head



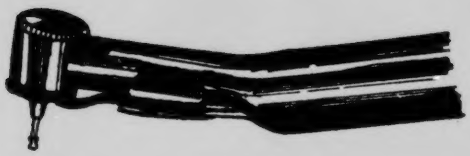
Bur

Types of Handpieces

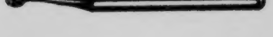
Friction Grip



Handpiece



Head



Bur

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

ASSIGNMENT SHEET #1–CHART TEETH

NAME ______________________________ SCORE __________

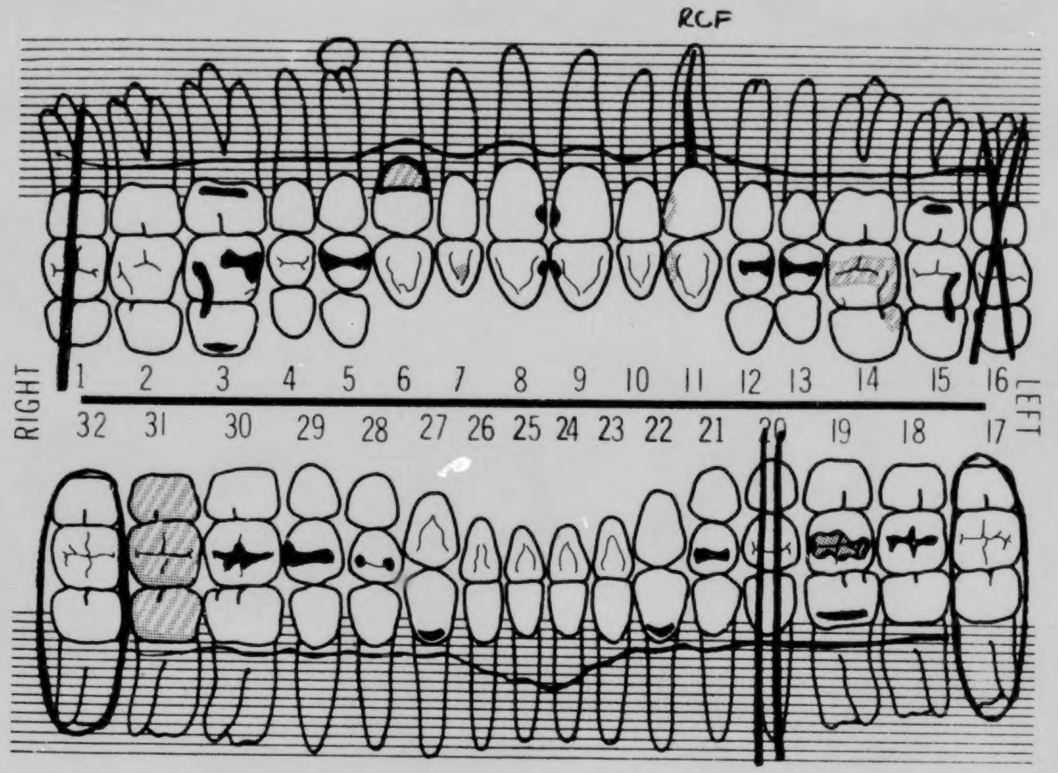
Methods of charting will vary from one office to another. The method used in this assignment is simple and effective.

Part I

Study the chart on the following page and locate the descriptions below:

Tooth #1	Removal indicated
Tooth #3	Mesial, distal, occlusal, facial, and lingual caries.
Tooth #5	Mesial, distal, and occlusal caries. Root end pathology.
Tooth #6	Faulty gold restoration.
Tooth #7	Lingual amalgam resotration.
Tooth #8	Mesial caries.
Tooth #9	Mesial caries.
Tooth #11	Mesial gold restoration; root canal filling.
Tooth #12	Distal and occlusal caries.
Tooth #13	Mesial, distal, and occlusal caries.
Tooth #14	Mesioocclusodistal gold restoration.
Tooth #15	Facial and occlusolingual caries.
Tooth #16	Tooth removed.
Tooth #17	Impacted.
Tooth #18	Occlusal caries.
Tooth #19	Faulty occlusal restoration; facial caries.
Tooth #20	Tooth missing.
Tooth #21	Occlusal caries.
Tooth #22	Facial caries.
Tooth #27	Facial caries.
Tooth #28	Mesial and distal pit caries.
Tooth #29	Distal and occlusal caries.
Tooth #30	Occlusal caries.
Tooth #31	Cast gold crown.
Tooth #32	Impacted.

ASSIGNMENT SHEET #1


RCF
RIGHT
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
LEFT

CARIES ■ AMALGAM, SILICATE, RESIN ▩ GOLD ▨

/ Removal indicated

// Tooth missing

× Tooth removed

○ Tooth impacted

— Bone level

⌓ Full denture (upper)

◡ Full denture (lower)

RCF RCF Root canal filling

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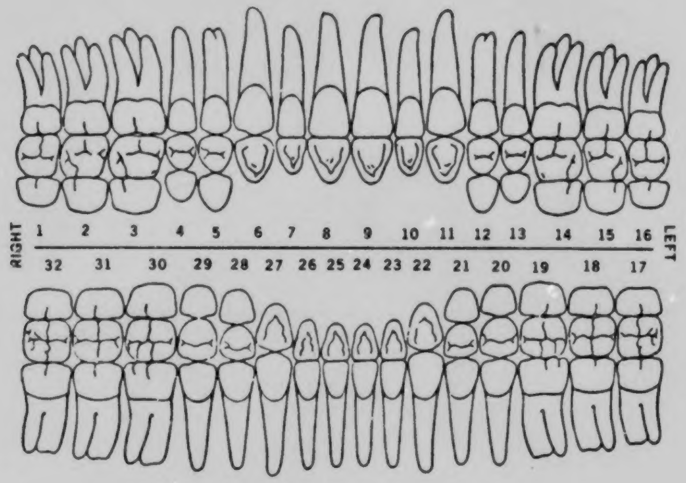
1. Did you find all of the descriptions?

   If no, which ones were you unable to locate?

ASSIGNMENT SHEET #1

Part II

Use the symbols below to chart missing teeth, caries, abnormalities, existing restorations and diseases. Use solid red to indicate restorations. Red filled in with diagonal lines will indicate restorations of gold. Blue indicates caries.



■	Amalgam, silicate, resin (black)
▨	Gold (diagonal lines)
☐	Caries (outline in pencil)
/	Removal indicated
//	Tooth missing
×	Tooth removed
≀≀	Open contact
	Outline root end involvement
	Draw in foreign body
	RCF Root canal filling

1. Tooth No. 4 Mesioocclusal amalgam
2. Tooth No. 10 Lingual pit caries
3. Tooth No. 22 Distal caries
4. Tooth No. 1 Missing
5. Tooth No. 14 Mesioocclusodistal inlay
6. Tooth No. 32 Root end pathology, distal root
7. Tooth No. 7 Mesial silicate
8. Tooth No. 30 Mesial & occlusal caries
9. Tooth No. 16 Removal indicated
10. Tooth No. 6 Facial gold
11. Tooth No. 25 Root canal filling
12. Tooth No. 20 Occlusal amalgam
13. Tooth No .17 Tooth removed
14. Tooth No. 3 Occlusolingual caries
15. Tooth No. 27 Facial caries
16. Tooth No. 8 Lingual resin
17. Tooth No. 15 Mesioocclusal amalgam
18. Tooth No. 31 Distal contact open
19. Tooth No. 19 Lingual amalgam
20. Tooth No. 9 Mesial composite

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

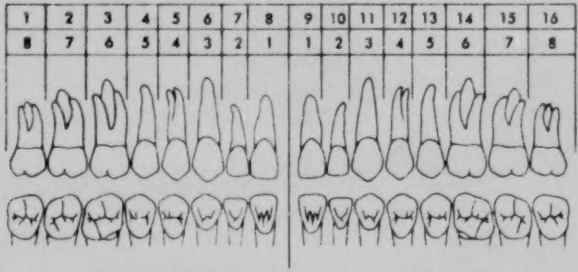
ASSIGNMENT SHEET #2--RECORD MEDICAL AND DENTAL HISTORY OF PATIENT

NAME ____ SCORE __________

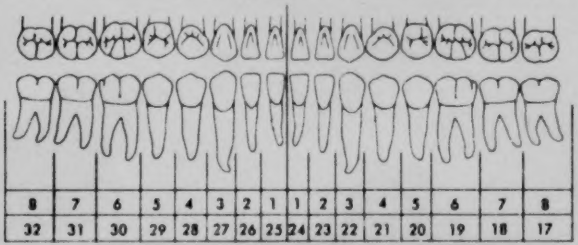
The dental assistant must become skillful in obtaining medical and dental history from a patient. The history is a factual record of patient's past and present physical condition. It provides statistical data on the individual patient and will assist the doctor in diagnosis.

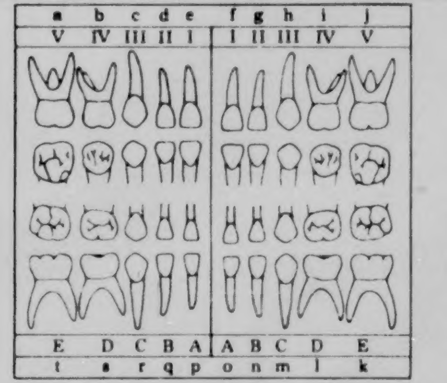
Use a classmate as a patient and role play in order to complete the history form on the next page.

LAST NAME
FIRST NAME
RECOMMENDED BY
NAME OF PHYSICIAN
ADDRESS
ADDRESS
ADDRESS OR TELEPHONE
CITY
STATE
REFERRED TO OR BY DR.
DATE OF EXAMINATION



Calculus: Slight ____ Moderate ____ Excessive ____ Oral cancer exam ____





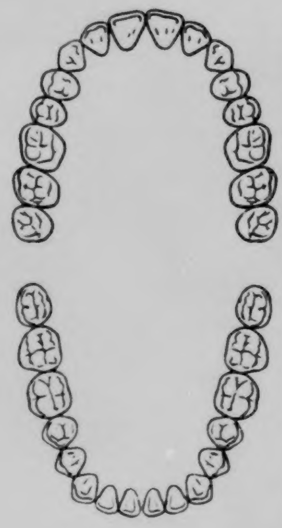
MOULD

TEETH	Upper	Lower
Centrals		
Laterals		
Cuspids		
Posteriors		

SHADE

TEETH	Upper	Lower
Centrals		
Laterals		
Cuspids		
Posteriors		

X-Rays
Date
Study Model
Photograph
Transillumination Area



School ____ Grade ____
Tonsils ____ Adenoids ____
Diseases – Measles ____ Chickenpox ____
Scarlet fever ____ Whooping cough ____
Mumps ____ Other ____
Habits – Thumb or finger sucking ____ Posture ____
Mouth breathing ____ Tongue ____
Reaction to dentistry ____

HEALTH HISTORY

What is the general condition of teeth? ____
What is the general condition of soft tissue? ____ Color? ____
Inflammation present? ____ Moderate? ____ Severe? ____ Condition of saliva? ____
Is there any recession? ____ Is there any pain in the region of the ear? ____
Do you have difficulty hearing? ____
How is the occlusion? ____ Abnormalities? ____
How long since you have been to a dentist? ____ What was done then? ____
Did you have x-rays? ____ Did you make regular visits to the dentist before then? ____
Have you lost many teeth? ____ Why? ____
Were there any complications with the extractions? ____
Have they ever been replaced by: A fixed bridge? ____ A removable partial? ____ A denture? ____
How often do you brush your teeth? ____ When? ____
Do your gums bleed? ____ When? ____
Does food collect between your teeth? ____ Is your breath offensive? ____
Do you eat sweets? ____ Raw vegetables? ____ Do you eat between meals? ____
Are your teeth sensitive to heat? ____ To cold? ____ To sweets? ____
How do you feel about your teeth? ____
How do you feel about dentures? ____
When was your last complete physical examination? ____ Birth date ____ Weight ____
Are you under the care of a physician now? ____ For what reason? ____
Are you receiving any medication? ____ What? ____
Do you have excessive bleeding from a cut? ____
Have you ever had radiation treatment? ____ Anemia? ____ Diabetes? ____
Do you have any allergies? ____ To penicillin? ____ To novocain? ____ To food? ____
Arthritis? ____ Rheumatic fever? ____ Blood pressure S ___ /D ___ / ___ Heart condition? ____
Have you ever had hepatitis? ____ T.B.? ____ Comments ____

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DA - 79-F

80-F

NAME

TOOTH			SERVICES NECESSARY					
		1						
		2						
		3						
		4						
		5						
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		38						

REPLACEMENTS NECESSARY

774

Form No. 97

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

ASSIGNMENT SHEET #3--APPOINT PATIENTS IN APPOINTMENT BOOK

NAME ____ SCORE ____________

One of the most important tasks in the typical day of a dental assistant is to appoint patients. Appointment time is usually spoken of in "units." One "unit" equals 15 minutes.

Example: When the dentist needs "four units," you would mark off one hour in appointment book

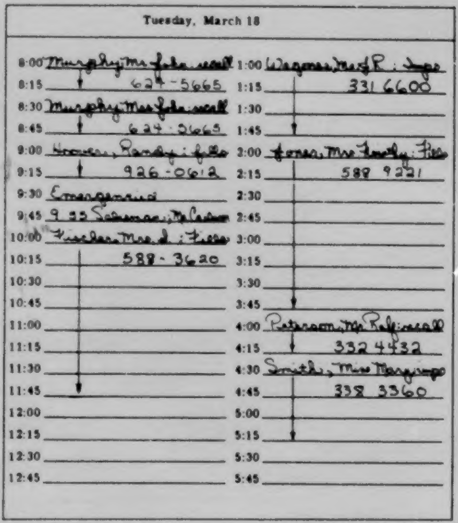
Some basic guidelines to help you schedule patients:

1. Always use a pencil to make appointment entries; penciled appointments can be erased if a patient cancels
2. Mark a red "x" by new patients
3. Schedule appointments for long settings, if possible
4. Schedule appointments that will require a lot of concentration and hard work for morning hours

   Examples: Preschool children, surgery, bridgework

5. Schedule a variety of types of work for a day

Example:



Tuesday, March 18

8:00	[illegible]	1:00	[illegible]
8:15	624-5665	1:15	331 6600
8:30	[illegible]	1:30	
8:45	624-5665	1:45	
9:00	[illegible]	2:00	[illegible]
9:15	926-0612	2:15	588 9221
9:30	Emergencies	2:30	
9:45	[illegible]	2:45	
10:00	[illegible]	3:00	
10:15	588-3620	3:15	
10:30		3:30	
10:45		3:45	
11:00		4:00	[illegible]
11:15		4:15	332 4432
11:30		4:30	[illegible]
11:45		4:45	338 3360
12:00		5:00	
12:15		5:15	
12:30		5:30	
12:45		5:45	

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ASSIGNMENT SHEET #3

Appoint these patients in the appointment book page provided on the next page.

NAME	AGE	WORK	BEST TIME
Andrews, Mr. K. B.	30	Bridge impression 10 units	Tuesday, mid-mornings
Hoover, Randy	5	Fills, 2 units	Tuesday mornings
Jones, Mrs. Timothy	45	Operative--8 units	Tuesday, p.m., Friday a.m.

(Conference revealed she needs 48 units of work, five separate appointments, allowing one week between each of the last three for laboratory work to be completed. First appointment for operative work prior to impressions should be for 8 units.)

NAME	AGE	WORK	BEST TIME
McIntosh, Mr. Kenneth	25	Recall--2 units	Early Tuesday mornings
Murphy, Mr. John	38	Recall--2 units	Early Tuesday mornings
Murphy, Mrs. John	36	Recall-2 units	Tuesday mornings
Peterson, Mr. Rolf	60	Recall--2 units	Tuesday at or after 4 p.m.
Smith, Miss Mary	55	Denture impressions 4 units	Tuesday, late afternoon
Zambolini, Mr. I. F.	21	Operative--4 units	Tuesday, late afternoon

DA - 83-F

ASSIGNMENT SHEET #3

Tuesday, January 8

8:00 ______________________________
8:15 ______________________________
8:30 ______________________________
8:45 ______________________________
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5:00 ______________________________
5:15 ______________________________
5:30 ______________________________
5:45 ______________________________

INTRODUCTION TO CHAIRSIDE ASSISTING
UNIT II

ASSIGNMENT SHEET #4--EVALUATE OFFICE MAINTENANCE PROCEDURES

NAME ________________________________ SCORE ____________

Today the public is more aware of the types of treatment, comfort and courtesies extended to the them than they have been in the past. The major concern in preparation for patient treatment is the condition of the operatiories. Cleanliness, tidiness and sanitation must be evident to the patient when they enter the operatory. It is your responsibility to see that everything is in readyness for your patient and the denist. Practice these routines by repeating them to a classmate or use a routine established by the instructor in the classroom until you can recall all of your duties.

Daily Routine

MORNING (Opening of office)

1. Arrive 30 minutes prior to the opening of the office for the day.
2. Check the appointment schedule of the patients for the day's treatment.
3. Check the patients' records, radiographs and laboratory cases for the day's schedule.
4. Check operatory for soap and disposable towels and miscellaneous supplies.
5. Check the operatory for basic dental materials and instrumentation.
6. Turn on the central compressor and the central vaccum unit. Check each for condensation of moisture in the compressor units and the lines.
7. Turn on the master switch of the dental units.
8. Check operating light for function and position.
9. Check the position of the dental chair, dental units (fixed or mobile), operating stools and the operating light. The equipment must be in a safe position for the entry of the patient and the dental team.
10. Dust operatory and equipment.

EVENING (Closing of office)

1. Following the dismissal of the last patient the chairside assistant tidies the operatory.
2. Turn off the X-ray units and the dental units and rinse the tubing of the central vacuum with clear water and/or a sanitizing solution.
3. Return the last patient's records, including radiographs to the secretarial assistant for filing.
4. Return soiled instruments to the central sterilizing area for cleansing in the ultrasonic unit, and placement on pre-set trays.
5. Pour impressions and return case units to the laboratory area for the dental technician.
6. Check the central vacuum for accumulation of waste, and turn off. The central compressor is turned off after a check for function.
7. Check the appointment schedule for the next day to see what necessary laboratory case work may be done and to see that the exposed radiographs are processed and mounted.
8. Check for a fresh uniform for the next day. Check cleansing and polishing of shoes to assure their neatness for the next day.
9. Other.

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INTRODUCTION TO CHAIRSIDE ASSISTING
UNIT II

JOB SHEET #1--POSITION PATIENT, DENTIST AND ASSISTANT FOR FOUR-HANDED OPERATIVE DENTISTRY

I. Materials

A. Chair

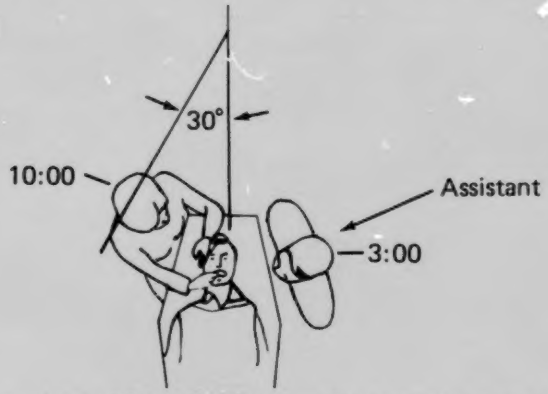
B. Stools

(NOTE: The assistant sits with feet on the stool, and head about 1/2" higher than doctor's head.)

II. Procedure for lower right quadrant

A. Press release on chair to position patient in angular position (Figure 1)

FIGURE 1



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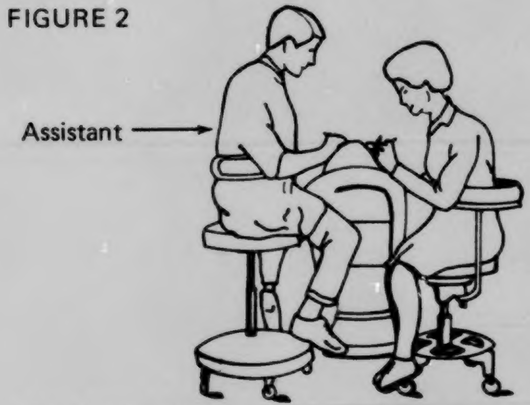
B. Seat dentist in 10 o'clock position, at 30° angle to patient (Figure 1)

C. Position self at 3 o'clock position (Figure 1)

JOB SHEET #1

D. Observe knee space and position of dentist and assistant (Figure 2)

FIGURE 2



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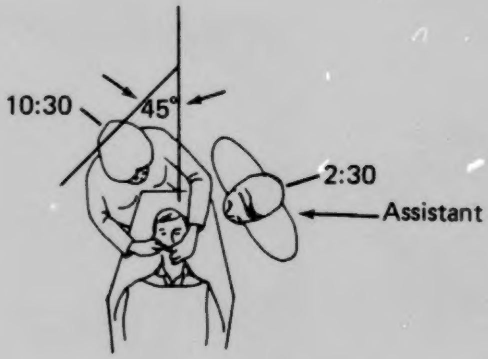
III. Procedure for lower left quadrant

A. Position patient

B. Seat dentist in 10:30 position, at 45° angle to patient (Figure 3)

FIGURE 3



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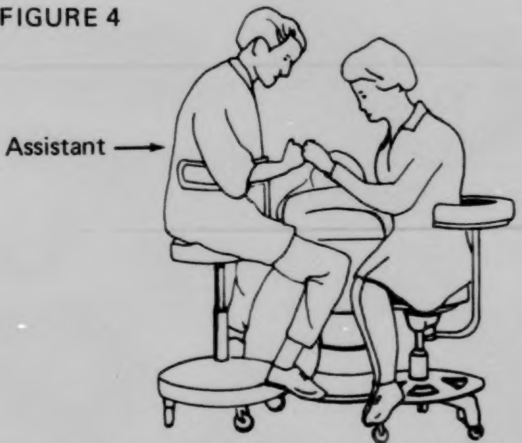
JOB SHEET #1

C. Position self at 2:30 (Figure 3)

D. Observe knee space and position of dentist and assistant (Figure 4)

FIGURE 4



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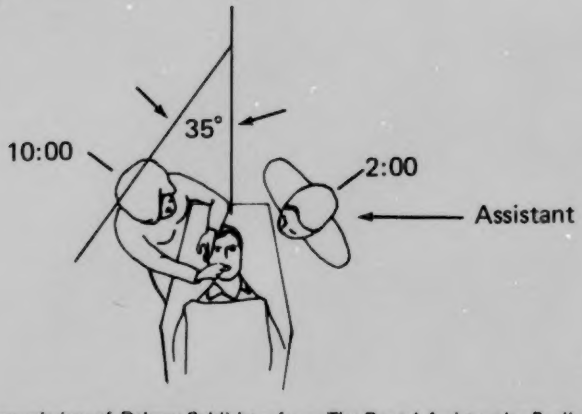
IV. Procedure for upper right quadrant

A. Position patent

B. Seat dentist in 10 o'clock position, at 35° angle to patient (Figure 5)

FIGURE 5



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C. Position self at 2 o'clock (Figure 5)

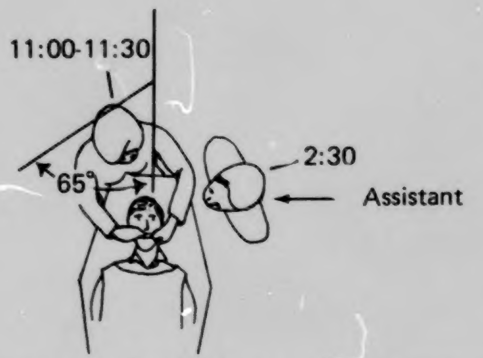
JOB SHEET #1

V. Procedure for upper left quadrant

A. Position patient

B. Seat dentist in 11 to 11:30 position, approximately 65° angle to patient (Figure 6)

FIGURE 6



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C. Position self at 2:30 o'clock (Figure 6)

D. Use a classmate to practice procedures to satisfaction of instructor

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

JOB SHEET #2--EXCHANGE AND RETRIEVE INSTRUMENTS

I. Materials

  A. Pencil or straight instruments

  B. Scissors or hemostat

  C. Handpiece

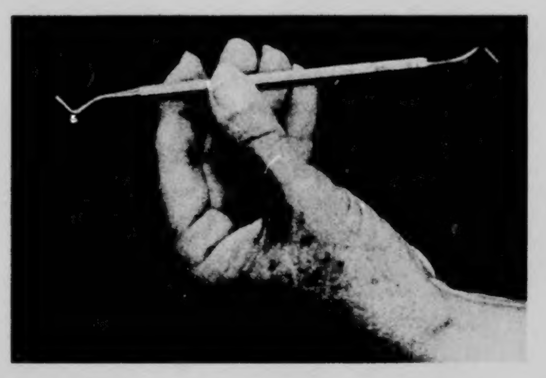
  D. Forceps

II. Procedure for exchange

  A. Pen grasp instruments

    1. Pick up instrument using a modified pen grasp; hold opposite working end (Figure 1)

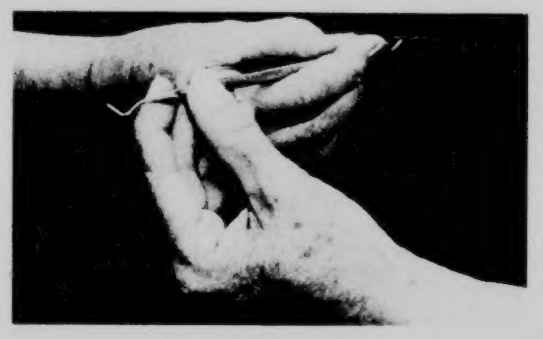
FIGURE 1



(NOTE: Direct blade or nib to be used upward for maxillary teeth or downward for mandibular teeth.)

    2. Place instrument between doctor's index finger and thumb (Figure 2)

FIGURE 2



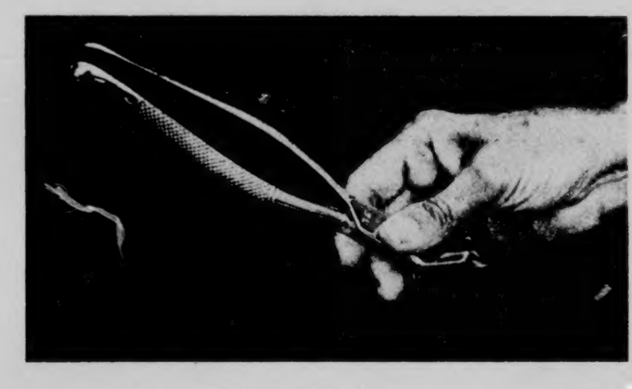
    3. Release instrument as soon as it is grasped firmly by doctor

JOB SHEET #2

B. Palm grasp instruments

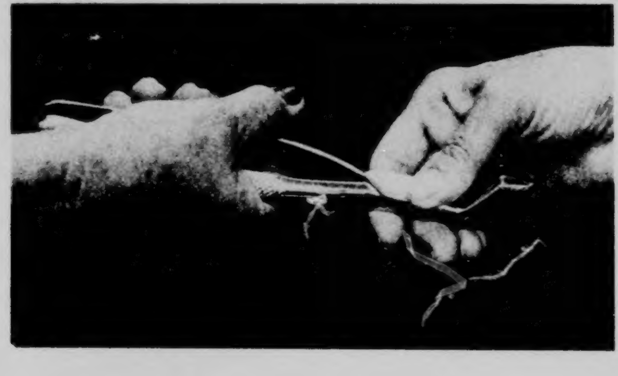
1. Pick up instrument using modified pen grasp; hold near working end (Figure 3)

FIGURE 3



2. Deliver instrument to palm of doctor's hand (Figure 4)

FIGURE 4



(NOTE: Direct beak upward for maxillary teeth, downward for mandibular teeth.)

C. Scissors and hemostat

1. Pick up near beak or blades using modified pen grasp

2. Direct the loops on the handles toward the doctor's fingers

(NOTE: The middle or index finger and thumb are used to operate scissors or hemostat.)

JOB SHEET #2

III. Exchange instruments by extending new instrument with modified pen grasp, and receiving used instrument with little finger (Figures 5 and 6)

FIGURE 5

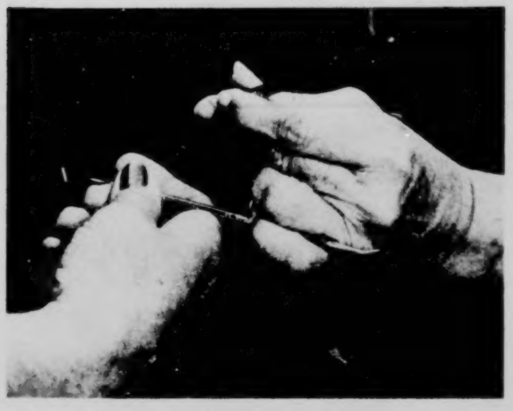
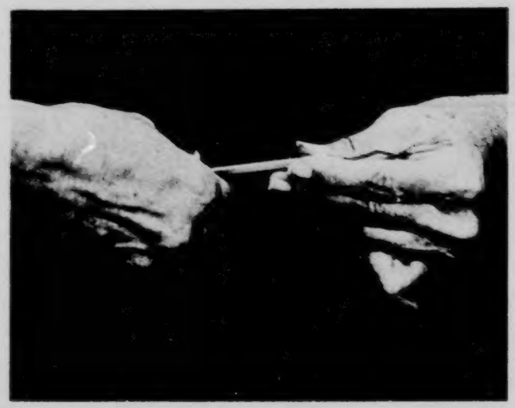


FIGURE 6



(NOTE: When doctor signals for exchange, close little finger around the instrument until it rests well back into the palm; then deliver new instrument.)

INTRODUCTION TO CHAIRSIDE ASSISTING
UNIT II

JOB SHEET #3--PLACE BUR IN HANDPIECE

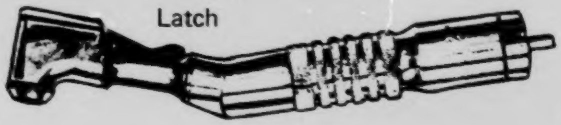
I. Materials

- A. Conventional handpiece
- B. Contra-angle handpiece
- C. Bur (latch type)
- D. Handpiece wrench

II. Procedure for conventional handpiece

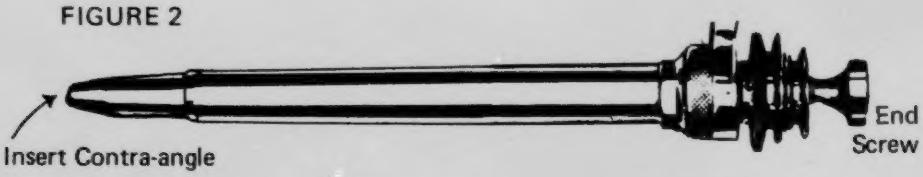
- A. Pick up contra-angle in left hand with pen grasp (Figure 1)

FIGURE 1



- B. Guide contra-angle handpiece into conventional handpiece (Figure 2)

FIGURE 2



- C. Tighten end screw on conventional handpiece to stabilize angle of handpiece
- D. Move latch to side, insert bur into contra-angle handpiece and lock by moving latch back

  (CAUTION: Check bur by pulling down on it to make sure it is latched.)

- E. Remove bur by holding handpiece with right hand; open latch with left hand

  (NOTE: To remove angle handpiece, loosen end screw of conventional handpiece.)

JOB SHEET #3

III. Procedure for friction grip handpiece

A. Hold handpiece in left hand using palm grip

B. Loosen chuck with handpiece wrench

C. Use left hand to insert friction grip bur

D. Tighten bur with handpiece wrench

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INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

JOB SHEET #4--USE EVACUATOR, WATER, AND AIR

I. Materials

- A. Dental machine and accesories
- B. Angled vacuum tip

II. Procedure for evacuator

(NOTE: The left-handed assistant may need to reverse hands for these procedures.)

A. Hold tip with right hand in a reverse palm-thumb grasp

(NOTE: The small finger rests on the metal tip just beyond the attachment of the tubing and tip.)

B. Position tip opening parallel to tooth

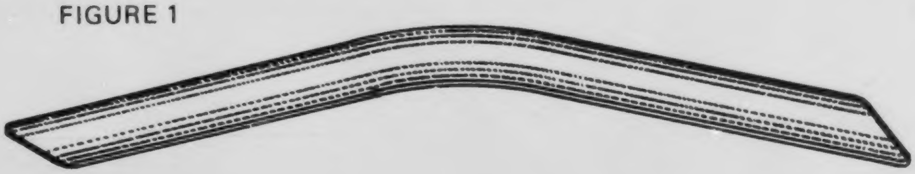
1. Place tip in buccal position for left side
2. Place tip in lingual position for right side

C. Place tip opposite surface treated for anterior teeth

Example: If the dentist is working on left incisal edge, place tip on the right

D. Position upper edge of tip even with occlusal surface for mandibular teeth (Figure 1)

FIGURE 1



JOB SHEET #4

E. Position lower edge of tip even with occlusal surface for maxillary teeth (Figure 2)

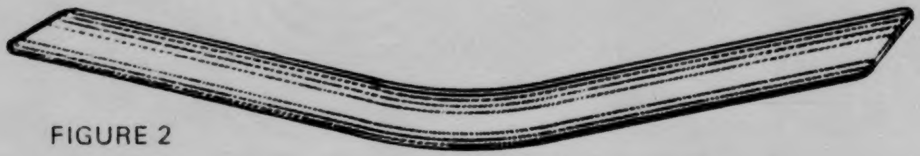


FIGURE 2

(NOTE: Position tip as close to tooth as possible without touching tooth or gingiva.)

III. Procedure for water

A. Adjust tip of syringe downward or upward as required

B. Use right hand when evacuation is required

C. Use left hand when evacuation isn't required

(NOTE: Hold water syringe parallel to evacuator tip.)

D. Rinse teeth well

(NOTE: Do not rinse directly on center of labial, buccal, or lingual surfaces as this causes water to spray.)

IV. Procedure for applying air

A. Adjust tip downward or upward as required

B. Use right hand for air application unless retracting or evacuation is required

C. Apply air gently

(NOTE: Do not apply excessive amounts of air to cavity preparation or prepared tooth; apply just enough to keep operating field clear.)

D. Apply air to clear mirror as required

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

JOB SHEET #5--TRIM MODEL FOR CASE PRESENTATION

I. Materials

- A. Ruler
- B. Pencil
- C. Model trimmer
- D. Study models (upper and lower)
- E. Sandpaper

  (NOTE: Use wet dry 000.)

II. Procedure for trimming base

(NOTE: If you plan to articulate the upper and lower models, you will need to remove excess stone from heels of both models so they will fit into articulator. Soak models in tap water for five minutes before trimming.)

- A. Set models on counter top
- B. Draw a line on lower model from heel to heel distal to retromolar pad
- C. Draw a line on upper model from hamular line to hamular line (tuberosity to tuberosity) (Figure 1)

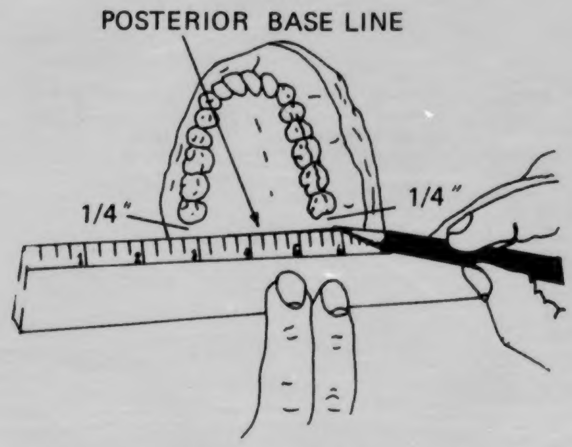


FIGURE 1

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JOB SHEET #5

D. Turn on water to model trimmer and cover surface with a film of water

(CAUTION: Never use grinding wheel dry.)

E. Place upper model against grinding wheel and trim to base line (Figure 2)

NOTE: The grinding wheel will cut faster if you do not exert too much pressure against it. Always allow wheel to wash itself clean after use.)

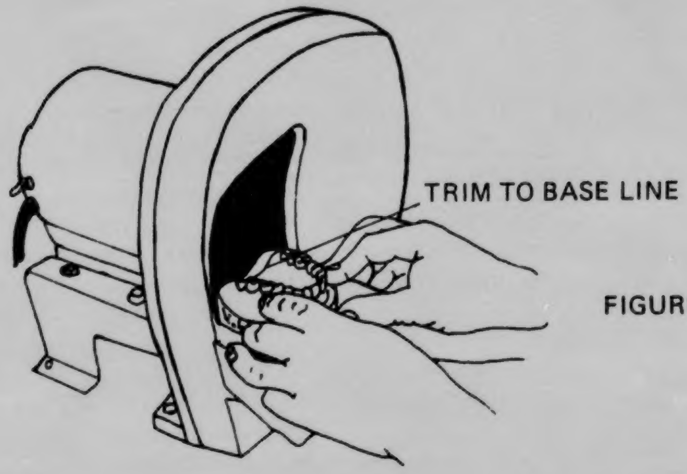

FIGURE 2

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F. Place lower model on model trimmer and trim to base line

G. Occlude upper and lower models

(NOTE: Minor adjustments may have to be made.)

JOB SHEET #5

H. Use model trimmer with cast in occlusion to trim posterior models together so they are in line (Figure 3)

(NOTE: This relationship of the posterior borders establishes the base line for further trimming of the bases to a symmetical pattern.)

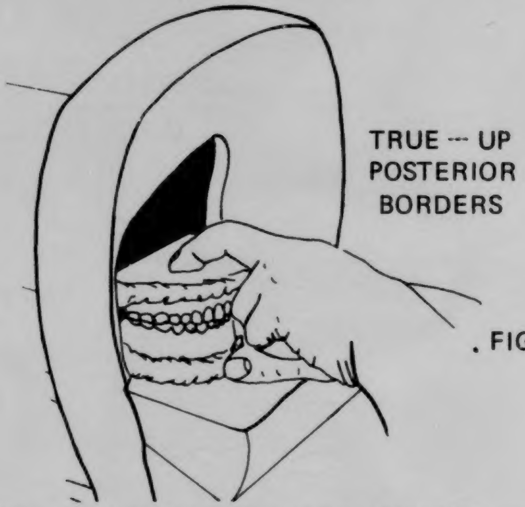

FIGURE 3

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III. Procedure for marking upper model

A. Place upper model on counter top

B. Using a ruler as a guide, draw a line through midline of the two central incisors to base line (Figure 4)

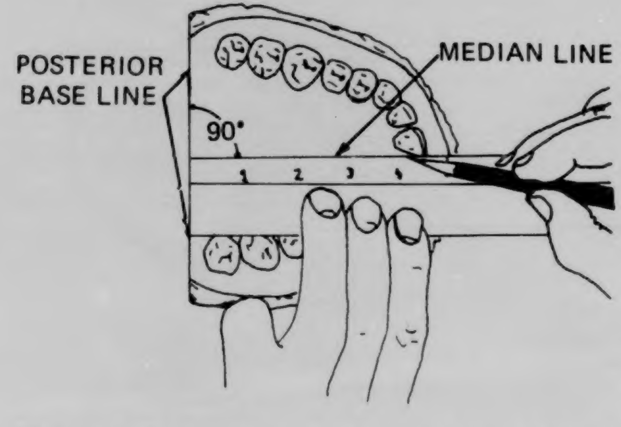

FIGURE 4

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JOB SHEET #5

C. Make a dot on midline 1/4 inch away from labial surfaces of central incisors (Figure 5)

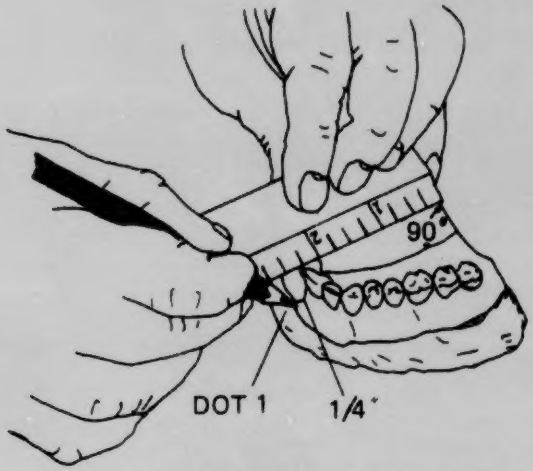

FIGURE 5

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D. Place ruler on occlusal surface of cast so back edge of ruler is parallel to posterior base line

E. Slide ruler forward until it is at tips of upper cuspids (Figure 6)

F. Draw a line and place two dots on line 1/2 inch away from labial surfaces of right and left cuspids (See Figure 6, Dots 2 and 3)

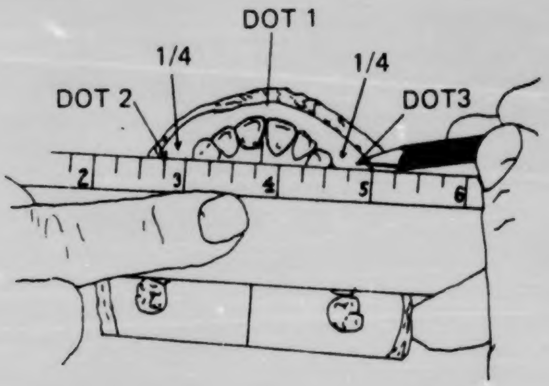

FIGURE 6

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JOB SHEET #5

G. Hold ruler across buccal surfaces of posterior teeth and place dots on posterior base line (See Figure 7, Dots 4 and 5)

(NOTE: Do this on both sides of model.)

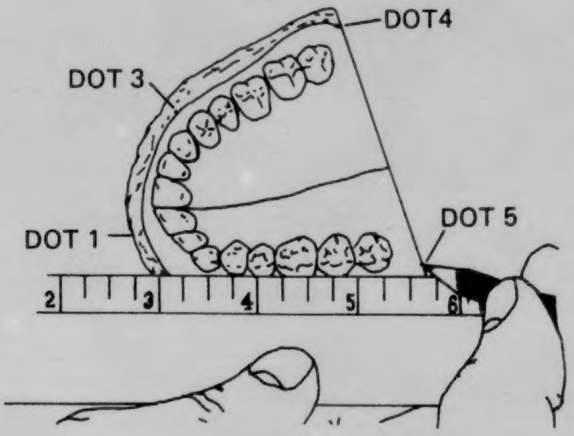

FIGURE 7

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H. Draw a line 1/4 inch in from posterior base line and place dots on this line 1/4 inch from disto-buccal corners of third molars (See Figure 8, Dots 6 and 7)

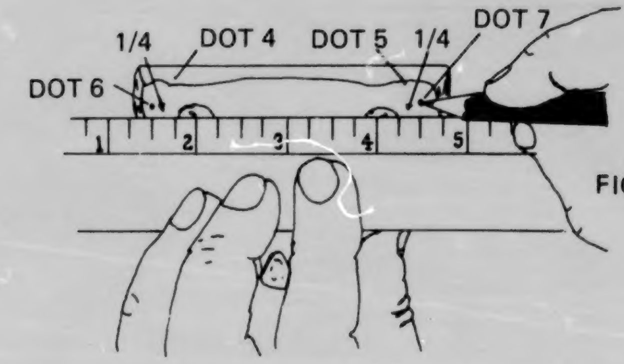

FIGURE 8

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JOB SHEET #5

I. Draw lines through dots (Figure 9)

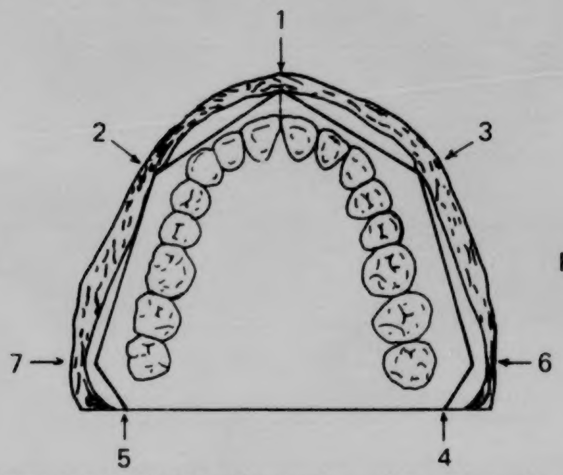

FIGURE 9

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IV. Procedure for trimming cast

A. Use model trimmer to trim excess stone to guidelines on upper model

B. Occlude upper model with lower model

C. Place occluded models on table of model trimmer

D. Using upper cast as a model, guide casts into model trimmer and trim lower cast to conform with design of upper model (Figure 10)

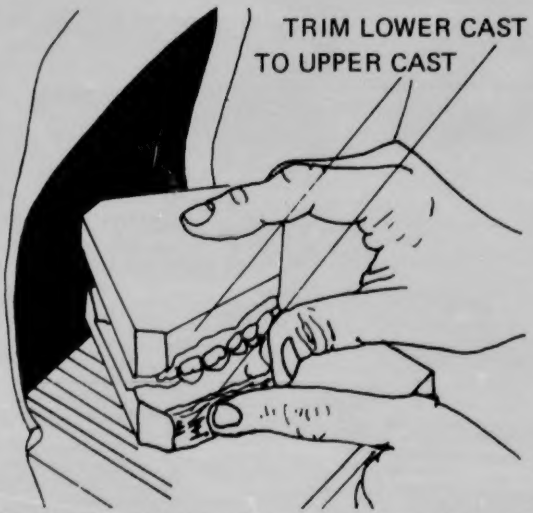

FIGURE 10

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JOB SHEET #5

E. Trim labial anterior surface of lower base to a curve (Figure 11)

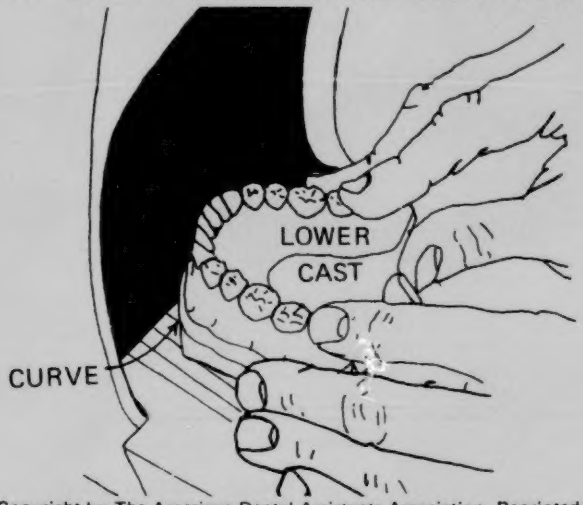

FIGURE 11

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V. Procedure for polishing

A. Soak models for 48 hours in soapy water

B. Dry and buff to high gloss, if requested

C. Label models

Examples: Name, age, date, and patient's filing number

DA - 107-F

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

TEST

NAME______________________________ SCORE__________________

1. Match terms associated with chairside assistance to their correct definitions. Place the correct numbers in the blanks provided. Definitions are continued on the next page.

______a. Localized channel within a cavity preparation

______b. Outline of a curve

______c. Shaft which holds a rotating instrument

______d. Surgical operation removing caries and hard tissue in order to shape tooth for restoration

______e. Elevation of enamel on surface of a tooth

______f. Opinion about condition and chances of recovery

______g. Extremely hard abrasive used to polish restorations

______h. Act of determining one disease from another

______i. Attachment for straight handpiece; enables dentist to reach areas not readily accessible using straight handpiece

______j. Junction of cavity wall and enamel surface of tooth

______k. Opening with sloping sides formed by adjacent surfaces of teeth

______l. Pertains to pulpal and gingival wall

______m. Boundary line or border of surface of tooth or cavity

1. Diagnosis
2. Prognosis
3. Cavity preparation
4. Cavity margin
5. Cavity floor
6. Undercut
7. Linear
8. Margin
9. Marginal ridge
10. Pulpal horn
11. Embrasure
12. Contour
13. Contra-angle
14. Carborundum
15. Mandrel
16. Restoration
17. Matrix band

______n. Straight or involving a single dimension

______o. Small projection of pulp tissue which lies directly under a cusp or lobe of a tooth

______p. Process of replacing whole tooth or part of tooth

______q. Device that temporarily replaces the missing wall of a tooth during the restoration procedure

2. Distinguish between duties of the dental assistant during patient's first and second visits. Write an "F" for first visit and an "S" for the second visit.

______a. Prepare patient for oral examination

______b. Take impressions of the dental arches

______c. Assist with recommended treatment

______d. Obtain medical and dental history

______e. Assist with financial arrangements

3. Select from the list below information that is needed for appointing a patient. Mark each correct answer with an "X."

______a. Patient's health history

______b. Time of appointment

______c. Occupation

______d. Nature of work to be done

______e. Telephone number

______f. Name of insurance company

______g. Patient's full name

______h. Length of appointment

______i. Blood type

______j. Sex

4. List basic setup items needed for non-operative procedures.

a. ______________________________

b. ______________________________

c. ______________________________

5. Select from the list below rules of conduct in the operatory. Mark each correct answer with an "X."

_____a. Display a radiant personality

_____b. Speak and refer to patient by name

_____c. Refer to patient by type of procedure

_____d. Treat patient as you would treat a guest in your home

_____e. Show interest in patient

_____f. Use technical terms when speaking to patient

_____g. Advise patient on personal problems

_____h. Use only conversation that deals with patient

_____i. Discuss politics

_____j. Concentrate on job at hand

_____k. Be sympathetic and comforting toward patient

_____l. Clean room after seating patient

_____m. Be pleasant but not familiar with patient

_____n. Talk in a loud voice

_____o. Maintain a pleasant expression

6. Match classification of cavities to their correct descriptions. Write the correct numbers in the blanks provided.

_____a. Anterior interproximal

_____b. Posterior interproximal

_____c. Involves the abraded or worn incisal edge or occlusal surface

_____d. Smooth surface

_____e. Pit and fissure

_____f. Anterior interproximal, involving the incisal edge

1. Class I
2. Class II
3. Class III
4. Class IV
5. Class V
6. Class VI

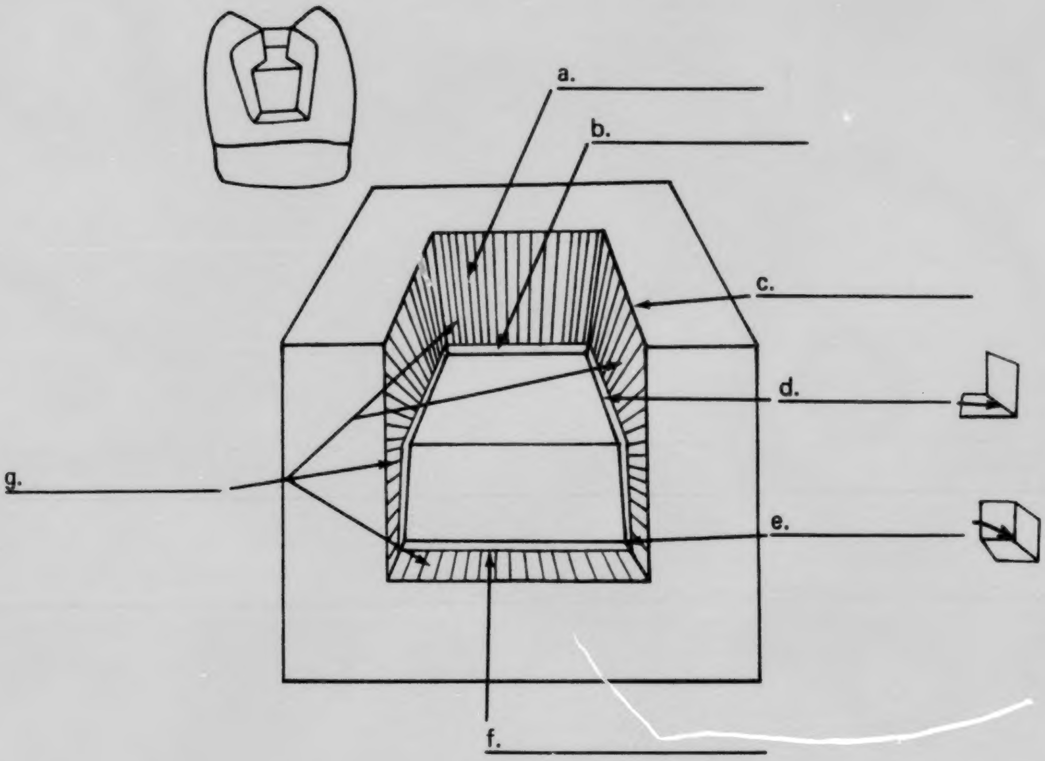
7. Distinguish between other classifications of cavities. Write an "S" for simple cavity and a "CP" for a compound cavity. Write a "CX" for a complex cavity.

   ______a. Involving two tooth surfaces

   ______b. Involving two or more surfaces of a tooth

   ______c. Involving one tooth surface only

8. Identify landmarks of cavity preparation shown in the drawing below. Write the correct names in the blanks provided.



Cavity wall
Line angle
Dentin wall
Point angle

Enamel wall
Cavosurface margin
Dentinoenamel union

9. Match types of cavity preparation to their correct descriptions. Write the correct number in each of the blanks provided.

______a. Process of angling, beveling, and smoothing of wall

______b. Gain access to cavity preparation for insertion and finishing restorative material

______c. Performing "toilet" or cleansing of cavity

______d. Curved shape and border of tooth surface using round bur

______e. Removing decayed and decalcified enamel and dentin

______f. Form and thickness given tooth to prevent displacement or fracture

______g. Relationship of tooth surfaces (walls) to prevent disloging of restoration

1. Outline form
2. Resistant form
3. Retention form
4. Convenience form
5. Removal of caries
6. Finishing enamel
7. Cavity debridement

10. Describe the long axis and the axial wall of a tooth.

a. Long axis (axial line)--______________________________

b. Axial wall (surface)--______________________________

11. Distinguish between the types of materials used in burs, mounted points, and wheels. Write a "B" for the materials used in burs, an "MP" for materials used in mounted points, and a "W" for materials used in wheels. A blank may have more than one answer.

______a. Emery

______b. Carbide steel

______c. Diamond

______d. Carborundum

______e. Steel

______f. Diamond chips

______g. Silicone carbide

12. Match types of burs to their correct uses. Write the correct numbers in the blanks provided. A blank may have more than one answer.

______a. Used in cavity preparation while forming the axial wall for alloy or inlay preparations

______b. Used in making slight undercuts or retention in cavity preparation of pulpal walls; also used for cleaning out decay

______c. Used for opening the pits and fissures of Class I cavities and excavating decay from all teeth

______d. Used for cutting through fissures and for smoothing down pulpal and axial walls

______e. Used for cutting through fissure and for smoothing down pulpal and axial walls

1. Round burs
2. Inverted cone
3. Straight fissure cross cut
4. Tapered fissure cross cut
5. Straight fissure plain cut

13. Select from the list below designs of bur shanks. Mark each correct answer with an "X."

______a. Gross shank

______b. Distal grip

______c. Contra-angle

______d. Long shank

______e. Friction grip

______f. Latch type

14. Name two examples of types of equipment used in a dental office.

a. Chair--______________________________

b. Oral evacuator--______________________________

c. Cabinets--______________________________

d. Operating stool--______________________________

15. Distinguish between types of handpieces and their uses. Write an "L" for low speed, an "H" for high speed, and "U" for ultra speed in the blanks provided.

______a. Used in cavity preparations

______b. Used for bulk removal of enamel and dentin in cavity preparation

______c. Used for removal of old restorations ______d. Used with abrasive stones and discs

______e. Used in preparation of retention grooves and bevels within a cavity

______f. Used in performing prophy

______g. Used for buffing and refining cavity preparations

______h. Used for developing cavity outline form

16. Distinguish between types of handpiece angles. Write an "L" to indicate latch angles, and an "F" to indicate friction grip angles.

______a. Contra-angle

______b. Miniature head contra-angle

______c. Straight handpiece

______d. Straight

______e. Standard contra-angle

______f. Right angle or prophy angle

17. Record medical and dental history of patient.

18. Chart teeth.

19. Appoint patients in appointment book.

20. Record medical and dental history of patient.

21. Evaluate office maintenance procedures.

22. Demonstrate the ability to:

    a. Position patient, dentist, and assistant for four-handed operative dentistry.

    b. Exchange and retrieve instruments.

    c. Place bur in handpiece.

    d. Use evacuator, water, and air.

    e. Trim model for case presentation.

(NOTE: If activities 17-22 have not been finished before the test, ask your instructor when they should be completed.)

INTRODUCTION TO CHAIRSIDE ASSISTANCE
UNIT II

ANSWERS TO TEST

1. a. 6
   b. 12
   c. 15
   d. 3
   e. 9
   f. 2
   g. 14
   h. 1
   i. 13
   j. 4
   k. 11
   l. 5
   m. 8
   n. 7
   o. 10
   p. 16
   q. 17
2. a. F
   b. F
   c. S
   d. F
   e. S
3. b, d, e, g, h
4. a. Mouth mirror
   b. Explorer
   c. Cotton pliers
5. a, b, d, e, h, j, k, m, o
6. a. 3
   b. 2
   c. 6
   d. 5
   e. 1
   f. 4
7. a. CP
   b. CX
   c. S

8. a. Enamel wall
   b. Dentin wall
   c. Cavosurface margin
   d. Line angle
   e. Point angle
   f. Dentinoenamel union
   g. Cavity wall

9. a. 6
   b. 4
   c. 7
   d. 1
   e. 5
   f. 2
   g. 3

10. a. Long axis--Imaginary line through a tooth
    b. Axial wall--Parallel to the long axis

11. a. W
    b. B
    c. MP, B
    d. MP
    e. B
    f. W
    g. W

12. a. 4
    b. 2
    c. 1
    d. 5, 3
    e. 3, 5

13. d, e, f

14. a. Conventional and lounge
    b. Saliva ejector and suction tip
    c. Fixed and mobile
    d. Dentist and assistant

15. a. H
b. U
c. U
d. L
e. H
f. L
g. L
h. U

16. a. L
b. F
c. F
d. L
e. F
f. L

17. Evaluated to satisfaction of instructor

18. Evaluated to satisfaction of instructor

19. Evaluated to satisfaction of instructor

20. Evaluated to satisfaction of instructor

21. Performance skills evaluated to satisfaction of instructor

OPERATIVE DENTISTRY
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to apply a rubber dam, mix restorative materials and assist with operative chairside procedures. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with operative dentistry to the correct definitions.
2. State the purposes of operative dentistry.
3. Select from a list duties of the dental assistant during operative procedures.
4. Select from a list steps in chairside assisting.
5. State guidelines for arranging instruments on trays.
6. Match types of restorative materials to their placements.
7. Match types of cements to their principal and secondary uses.
8. Select from a list chemical components of amalgam.
9. Select from a list mercury specifications for dental use.
10. Name sources of moisture while placing an amalgam.
11. Describe delayed expansion and its effects.
12. Select from a list reasons for polishing an amalgam restoration.
13. Arrange in order steps in acid etching of a tooth.
14. Distinguish between the purpose of cavity base and cavity liner.
15. Identify design parts of hand instruments.
16. Match formula numbers of instruments to their correct descriptions.
17. Match cutting instruments to their correct uses.
18. Match other types of instruments to their correct uses.
19. Identify types of dental matrices.

20. Identify types of equipment used in rubber dam placement.
21. Select from a list purposes of the rubber dam.
22. Demonstrate the ability to:
    a. Apply rubber dam.
    b. Prepare a calcium hydroxide cavity base.
    c. Mix a carboxylate cement.
    d. Mix a zinc phosphate cement.
    e. Prepare basic anterior composite tray setup.
    f. Prepare matrix retainer.
    g. Prepare tray setups for amalgam restoration MO Class II.
    h. Use amalgamator.
    i. Assist with amalgam restoration.
    j. Assist with polishing amalgam.

OPERATIVE DENTISTRY
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Order film.

   B. Make transparencies.

   C. Provide student with objective sheet.

   D. Provide student with information and job sheets.

   E. Discuss unit and specific objectives.

   F. Discuss information and job sheets.

   G. Provide equipment and materials for job sheets.

   H. Demonstrate job sheets.

   I. Prepare a handout on gold foil for student to use for certification purposes later.

   J. Show students examples of poorly triturated amalgam.

   K. Lead a discussion on how moisture affects amalgam.

   L. Demonstrate or discuss overhanging margins.

   M. Have students read manufacturer's instructions for cements, composites, and various brands of amalgams used in a dental office.

   N. Demonstrate removing excess amalgam from carrier.

   O. Have students practice punching holes in paper before punching holes in rubber dam (Job Sheet #1).

   P. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Cutting Instruments

      2. TM 2--Plastic Rubber Dam Holder

      3. TM 3--Metal Rubber Dam Holder

      4. TM 4--Matrix Retainer

D. Job sheets

1. Job Sheet #1--Apply Rubber Dam
2. Job Sheet #2--Prepare a Calcium Hydroxide Cavity Base
3. Job Sheet #3--Mix a Carboxylate Cement
4. Job Sheet #4--Mix a Zinc Phosphate Cement
5. Job Sheet #5--Prepare Basic Anterior Composite Tray Set-Up
6. Job Sheet #6--Prepare Matrix Retainer
7. Job Sheet #7--Prepare Tray Setups for Amalgam Restoration MO Class II
8. Job Sheet #8--Use Amalgamator
9. Job Sheet #9--Assist with Amalgam Restoration
10. Job Sheet #10--Assist with Polishing Amalgam

E. Test

F. Answers to test

III. Unit references:

A. Barton, Rogers E., and Wood, Matthew T. *Dental Assisting Course VI: Laboratory and Technical Application.* 3rd ed. Chapel Hill: University of North Carolina, 1980.

B. Taylor, Duane F. *Dental Assisting Course IV: Dental Materials and Technical Procedures*. 3rd ed. Chapel Hill: University of North Carolina, 1980.

C. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W.B. Saunders Co., 1976.

IV. Films:

A. "Composits: Types, Pulp Protection, Etching, Pin Technique; Placement and Finish." 11 1/2 mins., color, 16mm, optional slides, 1973.

B. "Contoured Amalgam Matrix--Wedging-Condensing Methods, Carving & Polishing." 9 min., color, 16 mm, optional slides, 1973.

(NOTE: Both of these films are available on a free-loan basis from the Veterans Administration, Central Office Film Library, 810 Vermont Ave., N.W., Washington, D.C. 20420.)

OPERATIVE DENTISTRY
UNIT III

INFORMATION SHEET

I. Terms and definitions

A. Operative dentistry--Involves prevention and restoration of defective enamel and dentin

B. Cavity preparation--Removal of caries and hard tissue in order to shape tooth for a restoration

C. Pledget--Small cotton pellet used to carry medication into tooth preparation

D. Matrix (retainer)--Device placed near or around cavity preparation to provide missing wall of tooth during condensation

E. Trituration--Mechanical mixing of silver and mercury

F. Viscosity--Degree of thickness of a fluid

G. Wedging--Placing and adapting a small shaped object on the side of a matrix to stabilize it

H. Undercut--Localized channel within a cavity preparation

I. Mulling--Kneading and rolling amalgam briefly until it becomes a homogenized mass

J. Finishing--Process of refining anatomical landmarks

K. Condensation--Process of compressing restorative material into cavity preparation

L. Abrasive strips--Used interproximally to reduce and polish proximal surfaces of new restorations

M. Amalgamation--Combination of an alloy with mercury; silver or copper alloy triturated with mercury makes up an amalgam

N. Amalgamator--Mechanical device used to combine alloy with mercury, or may be a ground glass, mortar and pestle

O. Amalgam--Combination of any metal or alloy with mercury

P. Crushing strength--Strength of a substance expressed in terms of pressure necessary to crush a unit of such substance

(NOTE: This is usually computed in pounds per square inch.)

Q. Catalyst--Substance (enzyme) that begins a chemical reaction

INFORMATION SHEET

R. Fluoride--Aids teeth in resisting decay; effective in drinking water or direct application on teeth

(NOTE: Sometimes fluoride crystals are used in cavity preparation when there are many caries.)

S. Cast gold--Used to strengthen or restore badly broken down teeth, fractures, or to correct occlusal relationship

Examples: Crown, inlay

T. Working end--End of instrument used directly in preparation

U. Rubber dam--Sheet of rubber used to isolate teeth during operative procedure

(NOTE: Rubber dams come in different sizes, weights, and colors, as well as on rolls or in individual sheets.)

II. Purposes of operative dentistry

A. Prevention and restoration of defects in enamel and dentin

B. Diagnosis and prevention of recurring caries

C. Surgical and mechanical measures of restorative procedures

III. Duties of the dental assistant during operative procedures

A. Assists dentist in accomplishing procedures as quickly and smoothly as possible

B. Provides two additional hands which keep dentist at work in mouth

C. Acquires complete knowledge of materials and instruments

D. Prevents cross-contamination

Examples: Wipes all parts of unit with bacterial agent, scrubs, rinses, and sterilizes instruments and burs

IV. Steps in chairside assisting

A. Anticipate dentist's needs

B. Keep field of operation free from debris

Examples: Use of air, vacuum equipment, saliva ejectors

C. Remember procedures and instrumentation for each operation

D. Develop a "code" or silent communication with dentist

INFORMATION SHEET

E. Pass and receive instruments in front of patient's chin whenever possible

(NOTE: There will be exceptions: if the dentist uses a mirror in his or her left hand, exchange instrument to the left of the patient's head.)

V. Guidelines for arranging instruments on trays

(NOTE: Instruments should extend one inch above groove in tray.)

A. Place hand instruments on left side of tray from bottom to top (or left to right) according to sequence of use

B. Place pen grasp instruments with working end toward right side and top of tray

C. Place palm grasp instruments toward left side (or bottom) of tray

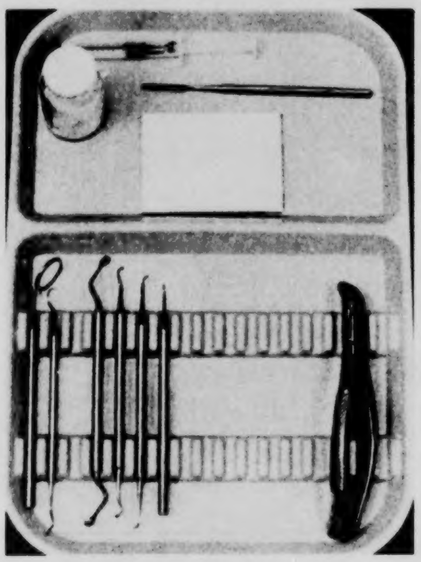
D. Place instruments to be transferred to doctor's left hand with working ends to left (or bottom) of tray

Example: Mouth mirror

E. Place other instruments to be used with left hand on tray with working ends toward right (or top) of tray

(NOTE: Other instruments and supplies are placed in an orderly arrangement; those used together are grouped together.)

Examples: Explorers, cement spatulas



INFORMATION SHEET

VI. Placement of restorative materials

A. Composite–Anterior teeth

B. Amalgam--Posterior teeth

C. Cast gold--Posterior teeth

Examples: Crowns, inlays, onlay, bridges

VII. Principal and secondary uses of cements

CEMENT	USES	
	PRINCIPAL	SECONDARY
Zinc phosphate	Cementing agent for indirect and orthodontic bands	Temporary restorations Luting agent for orthodontic appliances
Zinc oxide eugenol	Temporary restorations Pulp capping Thermal insulating bases	Root canal restorations Cementing agent for indirect restorations
Calcium hydroxide	Pulp capping Thermal insulating bases	

VIII. Chemical components of amalgam

(NOTE: This is A.D.A. specification.)

A. 65% silver

B. 25% tin

C. 6% copper

D. 2% zinc

(NOTE: Some gold is added to provide a sheen to amalgam, but the amount is unknown.)

INFORMATION SHEET

IX. Mercury specifications for dental use

- A. Properly distilled and free from residues
- B. Labeled for weight content

  (NOTE: It is labeled for weight content if it meets A.D.A. specifications.)

- C. Mirror-like surface, bright and free from scum

X. Sources of moisture while placing an amalgam

(NOTE: Moisture causes excessive expansion of an amalgam restoration.)

- A. Condensing instruments
- B. Hands and fingers
- C. Saliva

XI. Delayed expansion and its effects

- A. Delayed expansion--Trapped gas within mass of amalgam that exerts pressure

  (NOTE: Delayed expansion starts about a week after insertion of amalgam into the cavity and lasts about six months.)

- B. Effects
  1. Overhanging margins
  2. Recurring caries
  3. Corrosion and possible post-operative pain from pressure

XII. Reasons for polishing an amalgam restoration

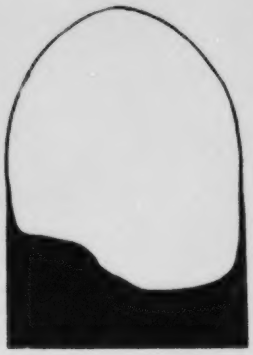
- A. Reduces surface roughness
- B. Increases resistance to corrosion
- C. Increases length of service

INFORMATION SHEET

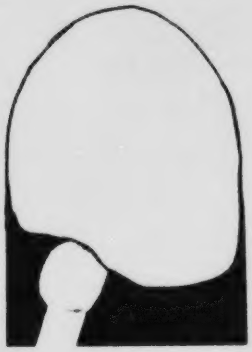
XIII. Steps in acid etching of a tooth

A. Determine which tooth needs to be restored

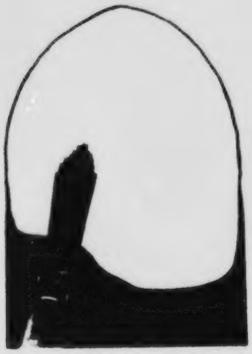
Example: Fractured incisor



B. Select shade of restorative material



C. Apply acid etch bonding agent



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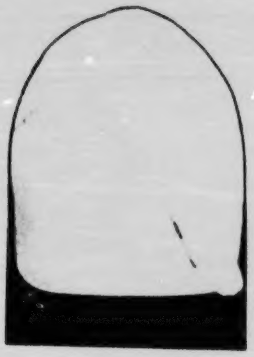
INFORMATION SHEET

D. Place restorative material



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XIV. Purpose of cavity base and cavity liner

A. Cavity base--Used to encourage recovery of pulp and protect pulp against mechanical or thermal trauma

B. Cavity liner--Covers walls and floor of cavity; used as a protective layer before placement of base

(NOTE: Most cements can be used as bases except for silicate or copper cement, which are considered to be too irritating.)

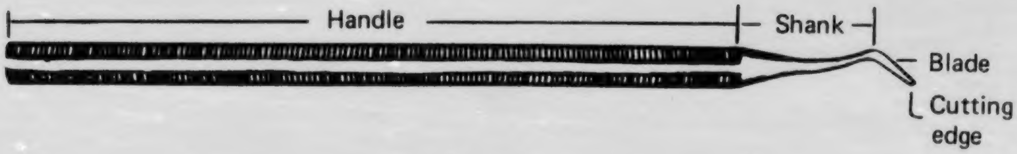
XV. Design parts of hand instruments

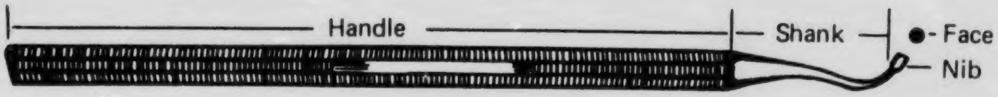
A. Handle

B. Shank

C. Blade or nib

D. Cutting edge or face





INFORMATION SHEET

XVI. Formula numbers of instruments and their descriptions

(NOTE: Instruments are designed to provide access to all areas of the tooth. Many instruments are designed with elongations of the shaft, blade, and cutting edge. The numbers give you a quick identification of each.)

A. First number--Width of blade in tenths of millimeters

B. Second number--Length of blade in millimeters

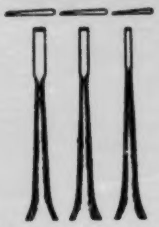
C. Third number--Angle of blade to shaft in centigrades

D. Fourth number--Angle of blade with long axis of the shaft

XVII. Cutting instruments and their uses

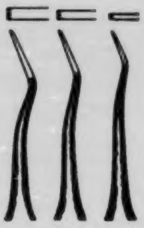
A. Straight chisel--Used for planing down enamel surface in Class III or IV cavity (anterior)

(NOTE: The longest side of beveled blade is always toward the bulk of tooth.)

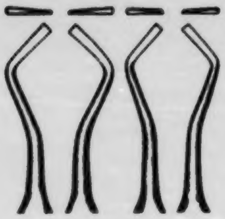


B. Bin-angle chisel--Used to smooth or form line angles of axial wall of Class II cavities (posterior)

Example: In pairs, mesial or distal



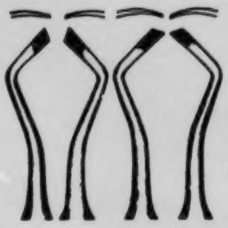
C. Enamel hatchets (right and left)--Form line angles of mesial or distal surfaces in Class II cavity



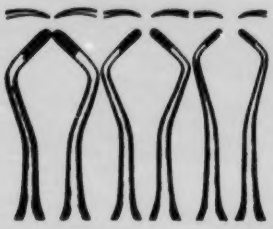
INFORMATION SHEET

D. Gingival margin trimmers (right and left)--Used to place the bevel on gingival margin wall in Class II cavity

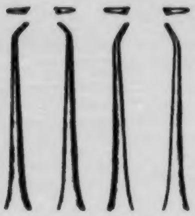
(NOTE: The doctor or expanded function assistant will plane the gingival margin from buccal to lingual wall, then reverse instruments and plane from lingual to buccal wall.)



E. Spoons (right and left)--Excavate decay, especially when close to pulp; carve amalgam restorations

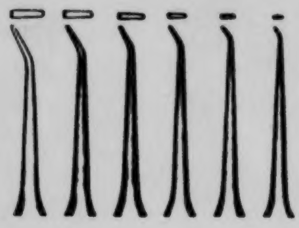


F. Angle former (right and left)--Used to make definite point angles and sharpen line angles in Class III or V cavities; used to carve cavo-surface bevels



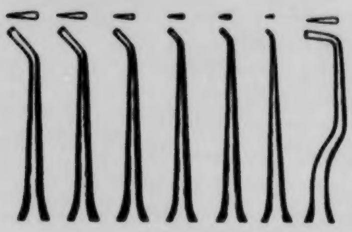
INFORMATION SHEET

G. Hoes--Used to form interior detail of all cavities, mostly Class III and V; used in scraping, planing, and direct cutting motion

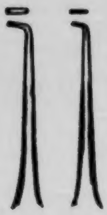


(NOTE: The degree of the angle and width of the blade depends on size and convenience of the cavity.)

H. Hatchet--Used to form interior detail in all classes of cavities



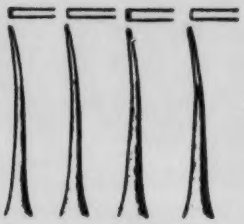
I. Bi-bevel hatchet--Used only in Class III, IV, and V cavity preparations



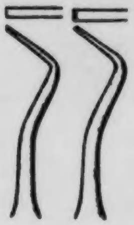
INFORMATION SHEET

J. Wedelstaedt--Used in same manner as straight chisels

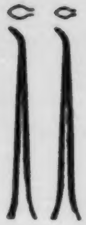
Example: Planing down enamel surface



K. Special hoes (mesial and distal)--Used to plane mesial and distal axial walls of posterior teeth



L. Cleoid--Used primarily as a carver on Class I, II, and V cavities

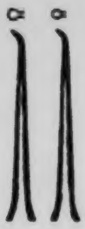


INFORMATION SHEET

M. Discoid--Used primarily as a carver on Class I, II, and V cavities

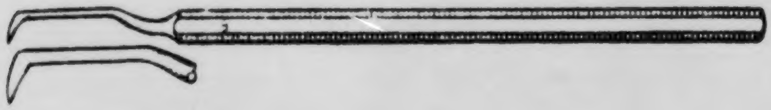
(NOTE: The cleoid and discoid have the same primary use, but due to special problems and doctor's choice one or the other may be used.)

Example: Carving types of grooves

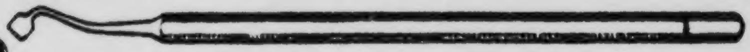


XVIII. Other types of instruments

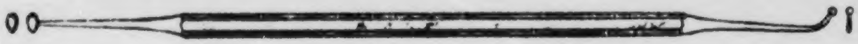
A. Marginal finishing knife--Used to trim restorative materials, mainly interproximally



B. Amalgam plugger (condenser)--Used to condense amalgam into prepared cavity

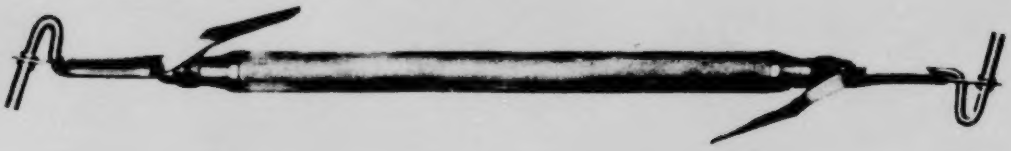


C. Burnisher--Used to shape, smooth, and polish



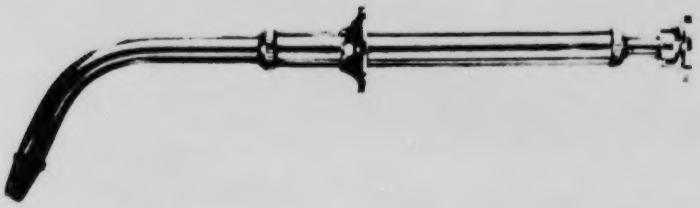
INFORMATION SHEET

D. Amalgam carrier--Used to carry amalgam to prepared cavity

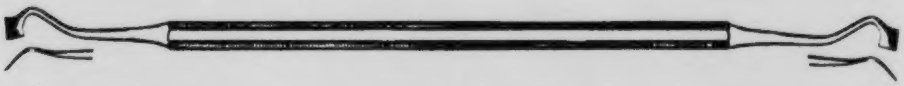


(NOTE: The amalgam carrier is small [Part I] on one end and larger [Part II] on the other. The large end is normally loaded first as the cavity is filled, and the small end is loaded as needed.)

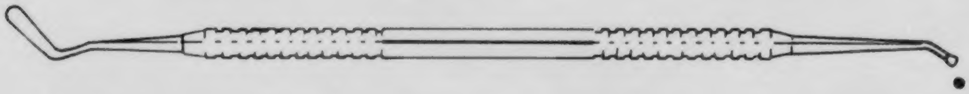
E. Amalgam carrier (improved type)--Used to carry amalgam to prepared cavity with more proficiency



F. Frahm amalgam carver--Used to carve amalgam restorations

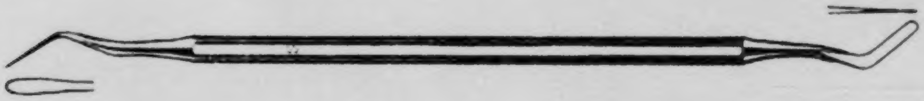


G. Beaver tail burnisher--Used to plug and carve porcelain restorations

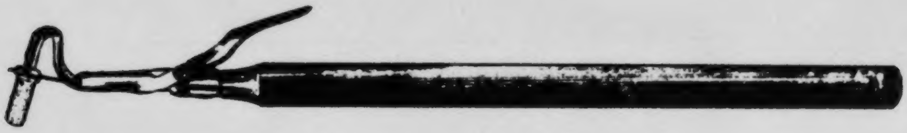


INFORMATION SHEET

G. Plastic filling instrument–Used to fill composite restoration



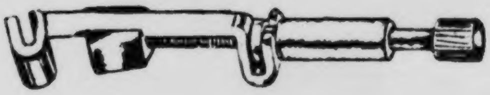
H. Composite carrier--Used to carry composite to cavity



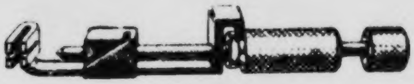
XIX. Types of dental matrices

(NOTE: The plural of matrix is matrices.)

A. Tofflemire contra-angle retainer

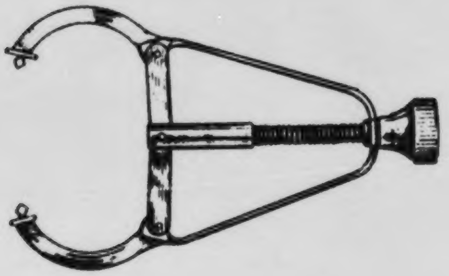


B. Tofflemire universal retainer



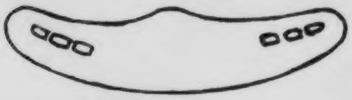
INFORMATION SHEET

C. Ivory #1 retainer

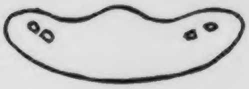


D. Matrix bands

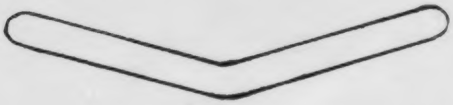
1. Half round molar



2. Half round cuspid (1st, 2nd)

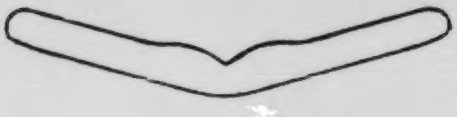


3. Universal plain matrix band

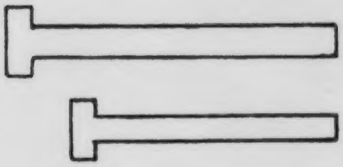


INFORMATION SHEET

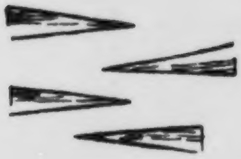
4. Distal and buccal extension strip



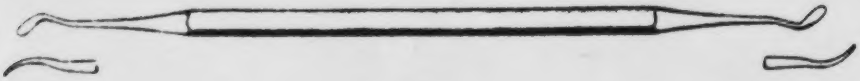
5. T bands



E. Matrix wedges



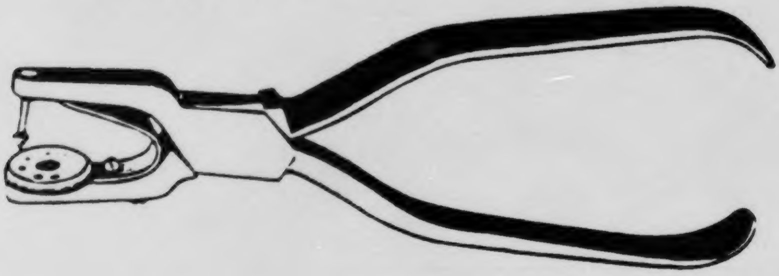
F. Matrix contouring instrument



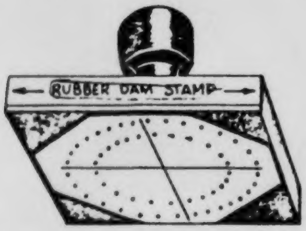
INFORMATION SHEET

XX. Equipment used in rubber dam placement

A. Rubber dam punch



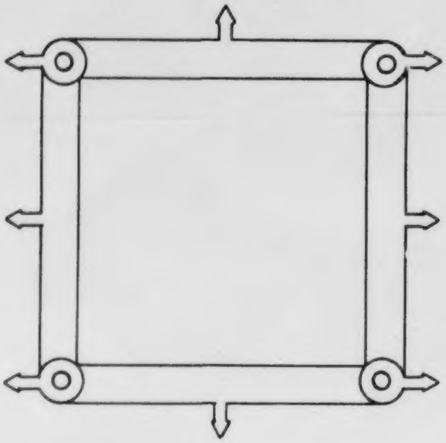
B. Rubber dam stamp



C. Rubber dam frames (Transparencies 2 and 3)

1. Plastic frame

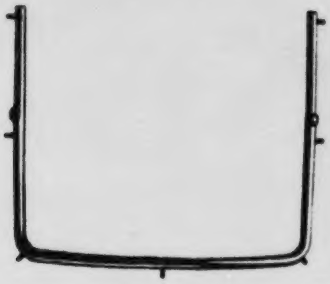
Example: Dam-E-Z Ray



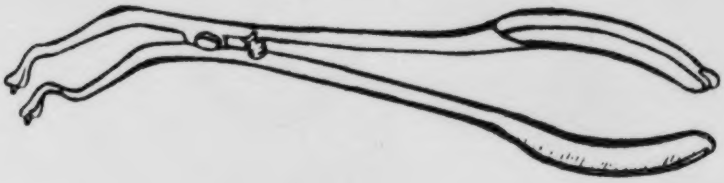
INFORMATION SHEET

2. Metal frame

Example: Young's frame

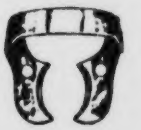


D. Rubber dam forcep

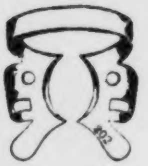


E. Rubber dam clamps

1. Molar (adult)

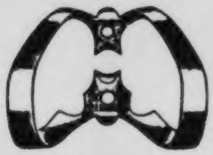


2. Beaked molar

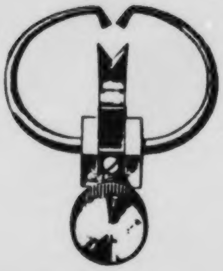


INFORMATION SHEET

3. Labial



4. Cervical



XXI. Purposes of rubber dam

A. Access and visibility

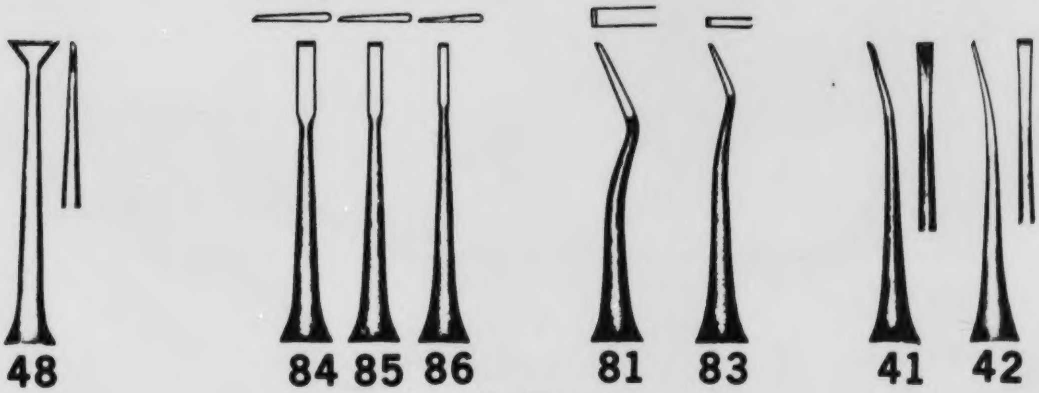
B. Moisture control

C. Patient management and protection

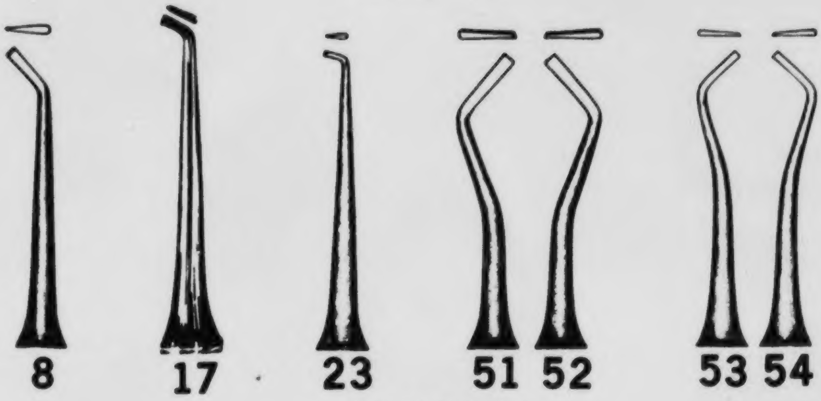
Examples: Control of tongue, keep patient from swallowing amalgam or debris

D. Increase operating efficiency

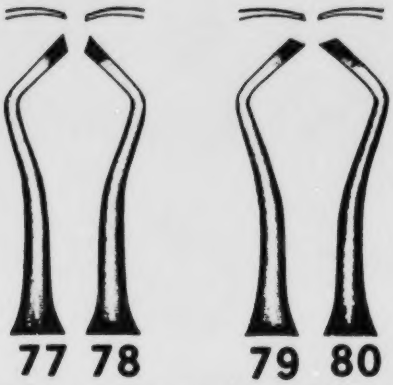
Cutting Instruments


48
84 85 86
81
83
41
42

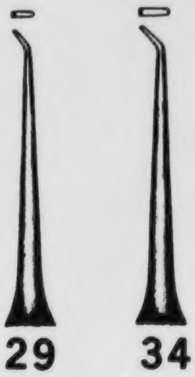
CHISELS


8
17
23
51 52
53 54

HATCHETS



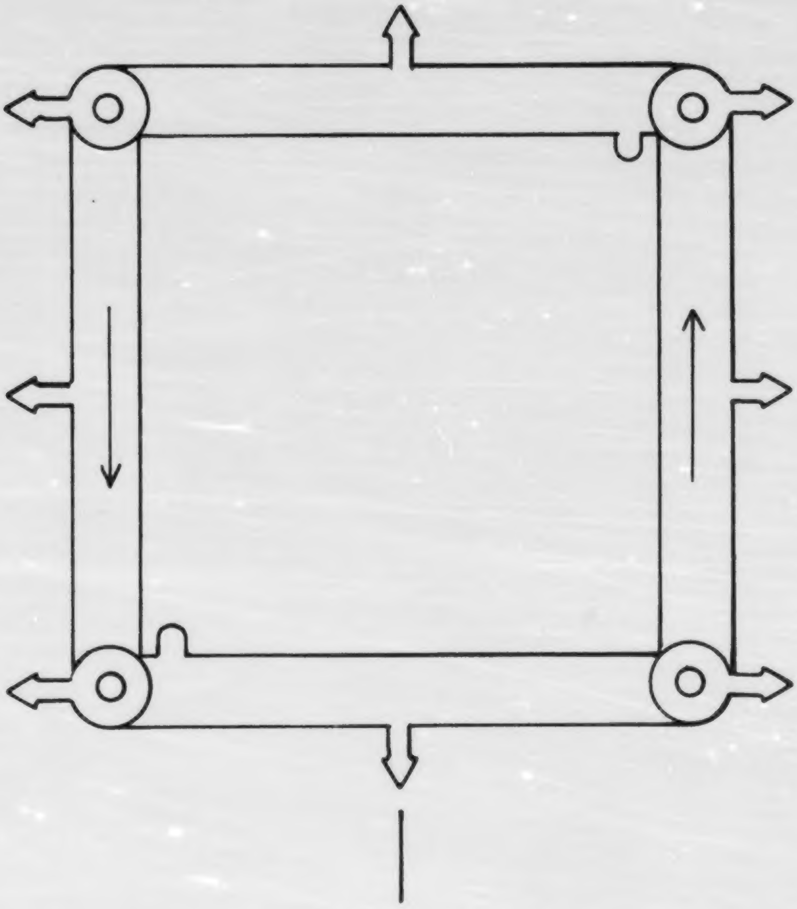
GINGIVAL MARGIN TRIMMERS



HOE EXCAVATORS

Plastic Rubber Dam Holder

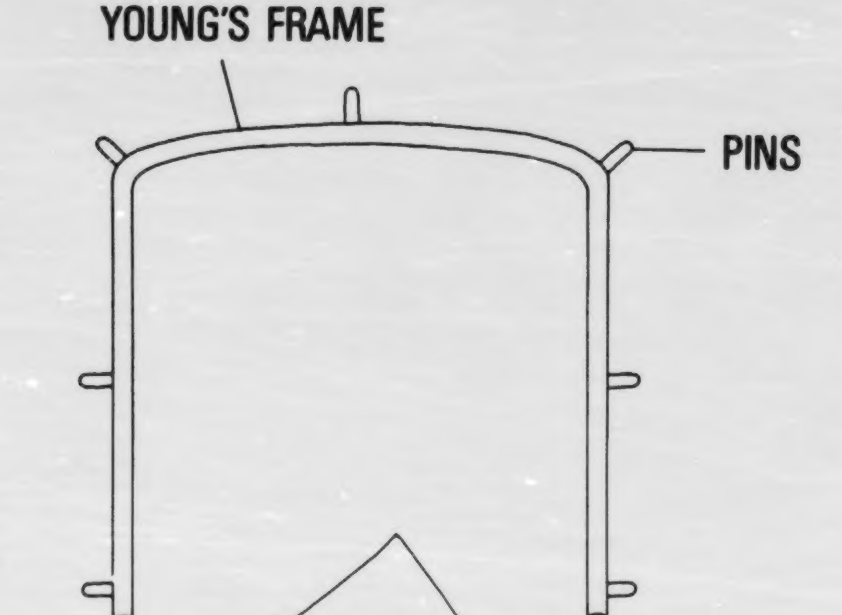
DAM-E-Z-RAY FRAME



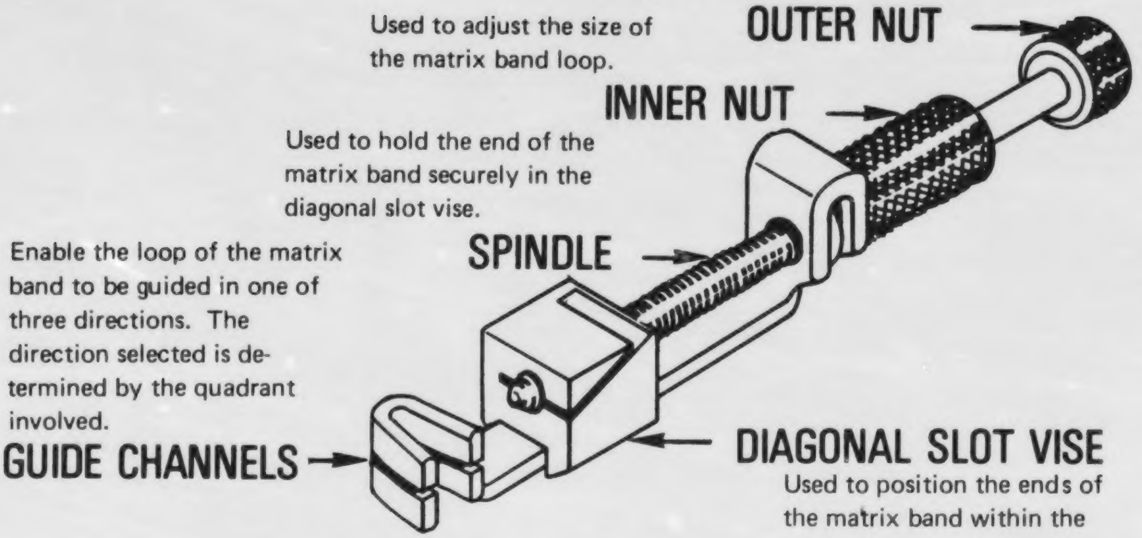
RETAINER LUGS

831

Metal Rubber Dam Holder


YOUNG'S FRAME
PINS
RUBBER DAM
CLAMPS

Matrix Retainer



OUTER NUT: Used to tighten the spindle and position it within the diagonal slot vise.

INNER NUT: Used to adjust the size of the matrix band loop.

SPINDLE: Used to hold the end of the matrix band securely in the diagonal slot vise.

GUIDE CHANNELS: Enable the loop of the matrix band to be guided in one of three directions. The direction selected is determined by the quadrant involved.

DIAGONAL SLOT VISE: Used to position the ends of the matrix band within the retainer.

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OPERATIVE DENTISTRY
UNIT III

JOB SHEET #1--APPLY RUBBER DAM

I. Equipment

  A. Lubricant

  B. Rubber dam

  C. Scissors (blunt point)

  D. Rubber dam punch

  E. Burnisher (beaver tail)

  F. Rubber dam holder

  G. Rubber dam and stamp

  H. Waxed dental floss, 18 inches long

  I. Rubber dam clamps

  J. Rubber dam forceps

II. Procedure for isolation

  A. Determine operating field

  Examples: Posterior isolation--Two teeth posterior to tooth being treated, extend to opposite central incisor
  Anterior isolation--Premolar (bicuspid) on same side to premolar on opposite side
  Endodontics--One tooth application
  Pedodontics--Only those teeth directly involved

  B. Prepare patient

    1. Instruct patient

    2. Check contact areas for roughness

    3. Lubricate corners of mouth

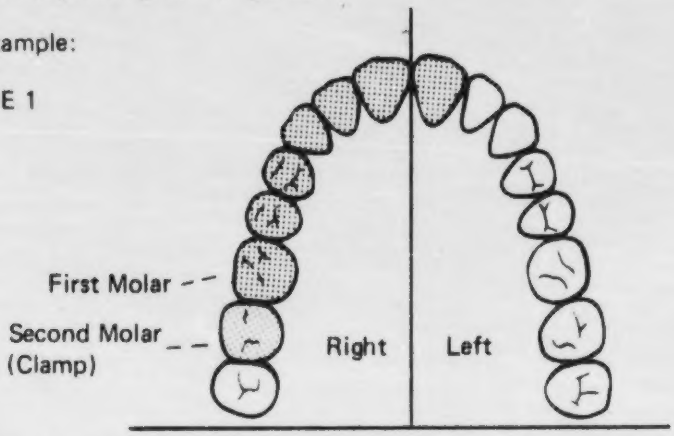
JOB SHEET #1

III. Procedure for maxillary posterior

A. Select operating field (Figure 1)

Example:

FIGURE 1


First Molar
Second Molar (Clamp)
Right
Left

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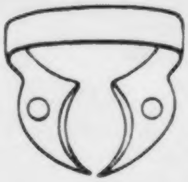
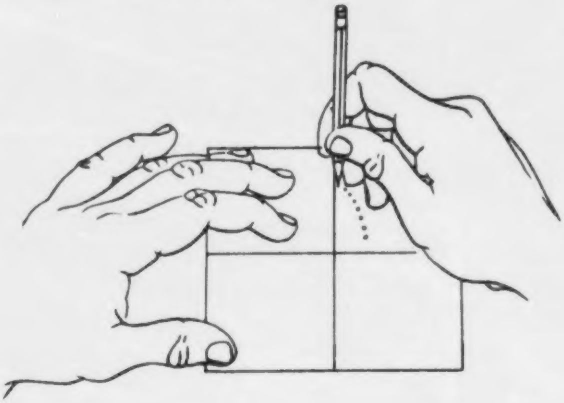
B. Select clamps

Example:



C. Punch and lubricate dam (Figure 2)

FIGURE 2

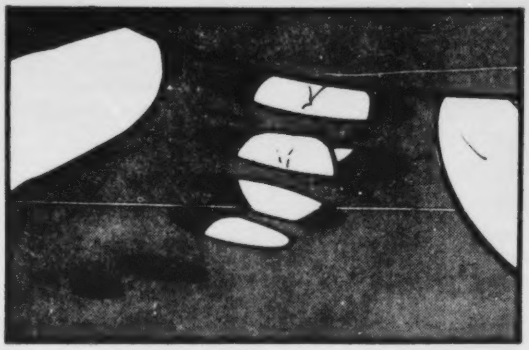


D. Tie floss to bow of clamp, and apply to maxillary right second molar

JOB SHEET #1

E. Place rubber dam around clamped teeth (Figure 3)

FIGURE 3



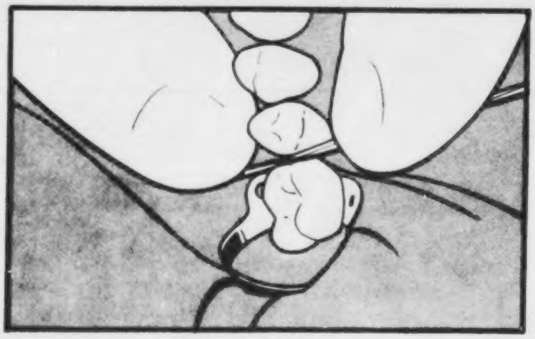
F. Continue seating rubber dam

G. Place rubber dam napkin

H. Place rubber dam frame

I. Use floss to guide dam through difficult contact areas (Figure 4)

FIGURE 4

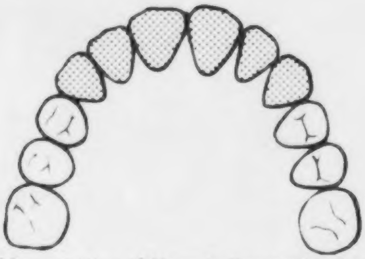


J. Invert rubber dam

IV. Procedure for anterior tooth

A. Select teeth (Figure 5)

FIGURE 5



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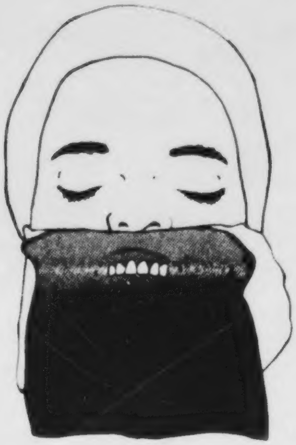
JOB SHEET #1

B. Select clamps

C. Stretch rubber dam over anterior teeth (Figure 6)

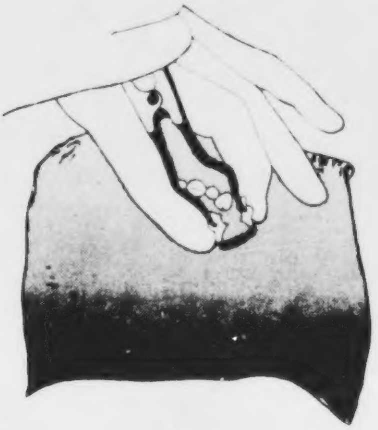
FIGURE 6



D. Place clamps on bicuspid teeth (Figure 7)

(NOTE: Set clamp down on lingual side and roll to buccal.)

FIGURE 7



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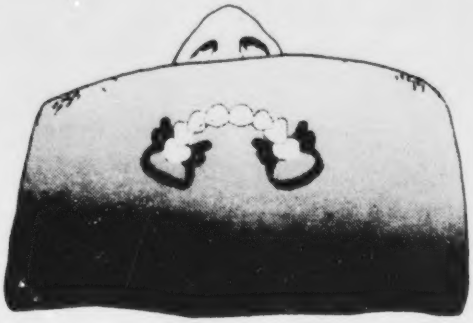
JOB SHEET #1

E. Completion of clamp (Figure 8)

FIGURE 8



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OPERATIVE DENTISTRY
UNIT III

JOB SHEET #2--PREPARE A CALCIUM HYDROXIDE CAVITY BASE

I. Materials

   A. Calcium hydroxide base paste and catalyst paste

      (NOTE: This comes in a prepared kit.)

   B. Mixing pad

   C. Ball-pointed instrument or stainless steel spatula

   D. Interval timer

      (NOTE: To provide the maximum working time, complete the mixing of the two pastes within 10 seconds. However, to shorten the working time by speeding up the setting, continue mixing the pastes for 30 seconds. DO NOT attempt to control setting time by increasing or decreasing the amount of catalyst dispensed.)

   E. 2" x 2" gauze

II. Procedure

   A. Set timer for 10 seconds

   B. Dispense *exactly equal* lengths of both pastes upon the paper pad provided; use as little as possible

   C. Stir immediately, using the ball-pointed instrument or small stainless steel spatula

   D. Mix thoroughly for uniform color

      (NOTE: The mixed material will set in about two and one-half minutes on the mixing pad under normal conditions [70°F with 50 percent relative humidity]. Setting time is much shorter in the mouth due to moisture and temperature.)

   E. Hold mixing pad with paste in reach of the dentist

   F. Wipe ball-pointed instrument with 2 x 2 and immediately after use

   G. Fold over mixing pad to keep other instruments from getting base on them

OPERATIVE DENTISTRY
UNIT III

JOB SHEET #3--MIX A CARBOXYLATE CEMENT

I. Materials

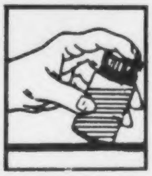
- A. Flexible stainless steel spatula
- B. Mixing pad or glass slab
- C. Cement kit (powder, liquid, powder measuring stick)

(NOTE: Mixing should be completed within 30 seconds or less.)

II. Procedure

- A. Tap powder bottle 2 or 3 times on the table to make the powder more compact (Figure 1)

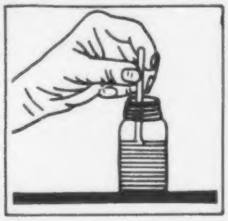
FIGURE 1



- B. Press measuring stick down into powder (Figure 2)

(NOTE: When withdrawn from bottle, remove excess powder from stick. Powder should be flush with end of stick.)

FIGURE 2



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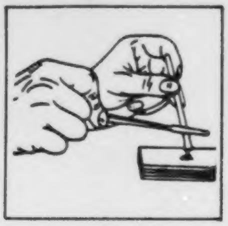
JOB SHEET #3

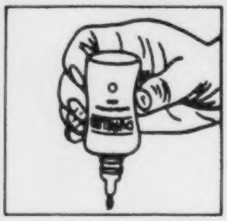
C. Release the powder onto the mixing pad or a glass slab by tapping the measuring stick with a spatula (Figure 3)

FIGURE 3



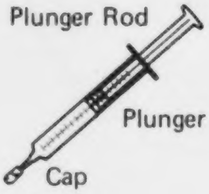
D. Hold liquid bottle upside down over mixing pad and squeeze; release pressure when the drop separates from the nozzle in order to obtain small and uniform drops (Figure 4)

FIGURE 4



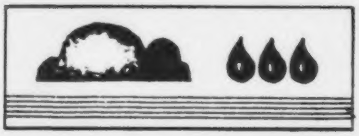
(NOTE. When using calibrated liquid dispenser, move the plunger from one full calibration mark to the next full calibration mark. This will measure out the correct amount of liquid. See Figure 5)

FIGURE 5



E. Place three drops of liquid to one measure of powder on mixing pad or glass slab (Figure 6)

FIGURE 6



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(NOTE: If larger quantities of cement are required, use the example given below.)

Example: Ratio recommended is 1 1/2 to 2 1/2 parts of powder to one part liquid by weight

JOB SHEET #3

F. Pull most of powder mass into liquid at one time, then add smaller portions of powder until desired consistency is reached

(NOTE: The resultant mixture is to be manipulated only as long as it is shiny and glossy.)

G. Practice mixing cement until you are proficient

OPERATIVE DENTISTRY
UNIT III

JOB SHEET #4--MIX A ZINC PHOSPHATE CEMENT

I. Materials

A. Timer

B. Glass slab (cool and dry - 65°F)

C. Spatula (flexible stainless steel)

D. Powder and liquid

E. Dispenser

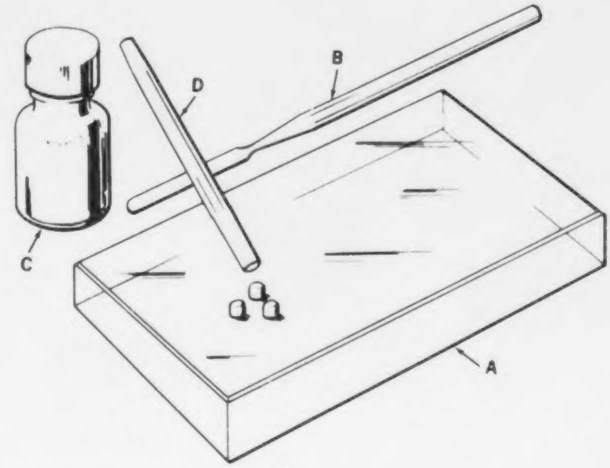
F. Shade guide

(NOTE: The maximum mixing time is two minutes. Zinc phosphate gives off heat and must be spatulated thoroughly to dispense the heat on the cool slab. Usually the shade is selected before mixing time by the dentist.)

II. Procedure

A. Dispense one scoop of powder from large end of dispenser and one scoop from small end (Figure 1)

FIGURE 1



Dispensing the zinc phosphate cement powder. A. Glass slab. B. Noncorrodible spatula. C. Powder bottle. D. Powder-measuring device, each end having a well, one large and one small, for full-portion and half-portion dispensations of powder.

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JOB SHEET #4

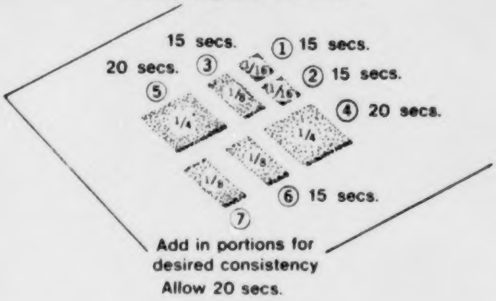
B. Place the powder on slab near one end (Figure 1)

C. Use spatula to pat powder level about 1 mm thick

D. Divide powder into halves, then divide each half, thus making four quarter portions of powder

E. Divide two of the quarter portions into eighths, and then one of the eighths portions into sixteenths (Figure 2)

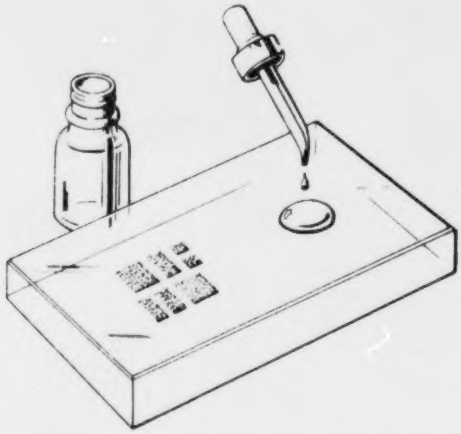
FIGURE 2 **MIXING SCHEDULE OF ZINC PHOSPHATE CEMENT**
total mixing time: 120 secs.


15 secs.
① 15 secs.
20 secs.
③
¹/₁₆
② 15 secs.
⑤
¹/₈
¹/₁₆
④ 20 secs.
¹/₄
¹/₄
¹/₈
¹/₈
⑥ 15 secs.
⑦
Add in portions for
desired consistency
Allow 20 secs.

F. Dispense 0.5cc of liquid on slab (Figure 3)

(NOTE: Shake liquid before dispensing and pump it out of the dropper several times by alternately pressing and releasing the rubber bulb.)

FIGURE 3



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JOB SHEET #4

G. Incorporate the first portion of the powder with the liquid, holding the spatula flat and using a sweeping back-and-forth motion; spatulate 15 seconds (Figures 4 and 5)

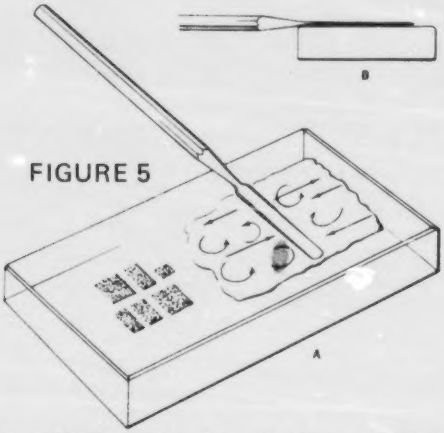

FIGURE 4

FIGURE 5

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H. Add the second and third portions in the same manner

I. Turn the spatula on edge and scrape mass together with two or three strokes

(NOTE: This is to organize the cement.)

J. Turn the spatula all the way over and free the mass by pressing spatula against the slab

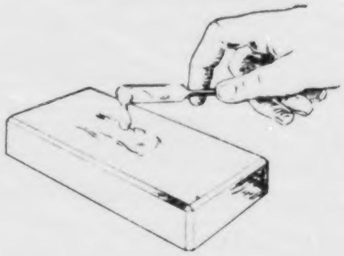
K. Begin to spatulate again and draw the remaining powder portions into the mix using the time schedule as in Figure 2

(NOTE: Spatulate over a wide area of the slab.)

L. Scrape entire mass into one unit on the slab (Figure 6)

(NOTE: For cementation, the mix should spin a thread from the spatula. If it breaks too quickly, the mix is too thin. If it has the consistency of putty, it is too thick. If it is too thick, start over. Do not try to add more liquid.)

FIGURE 6



JOB SHEET #4

M. Leave a small amount of cement on slab in front of dentist to be used for testing setting time

III. Procedure for cleaning slab

A. Wash spatula and slab using sodium bicarbonate solution to remove any stubborn particles

B. Thoroughly rinse and dry and place in proper storage area

(NOTE: Never leave cement on slab to harden. Clean immediately.)

OPERATIVE DENTISTRY
UNIT III

JOB SHEET #5--PREPARE BASIC ANTERIOR COMPOSITE TRAY SETUP

I. Materials

   A. Rubber dam (choice)

   B. Basic setup (operative)

   C. Spoon excavator

   D. Small hatchet

   E. Curved chisel

   F. Plastic matrix

   G. Strip clip

   H. Wedge

   I. Hoe

   J. Plastic instrument

   K. Bur block set with burs

   L. Bur wrench

   M. Handpieces (high speed and low speed)

   N. Finishing strips

   O. Polishing equipment

II. Procedure

   A. Gather all instruments

   B. Place on tray

   C. Ask instructor to check instruments

OPERATIVE DENTISTRY
UNIT III

JOB SHEET #6--PREPARE MATRIX RETAINER

I. Materials

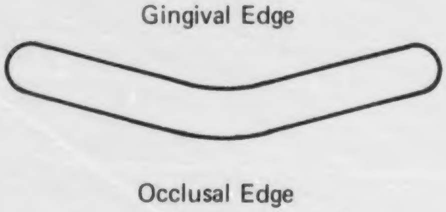
A. Matrix band

B. Retainer

II. Procedure

(NOTE: The smaller, inner curve is used for the gingival edge [small part of tooth]. The large, wider, outer curve is used for the occlusal edge. Figure 1.)

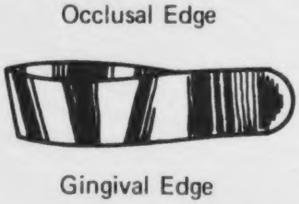
FIGURE 1



A. Place the matrix band edges together (side by side) but do not bend curve (Figure 2)

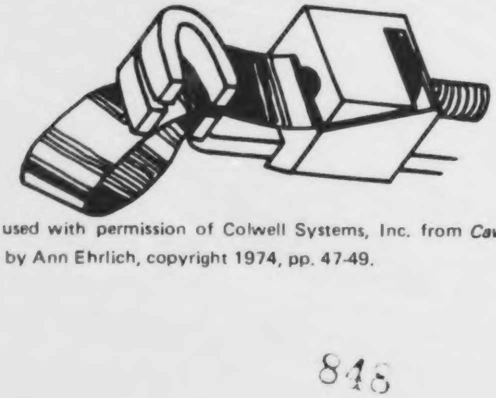
(NOTE: Band should form an uneven loop.)

FIGURE 2



B. Insert ends of band into diagonal slot vise, occlusal edge down (Figure 3)

FIGURE 3



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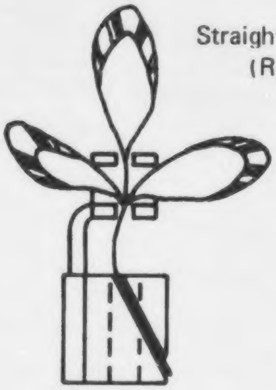
JOB SHEET #6

C. Direct loop through appropriate guide channel (Figure 4)

1. Pull band to your left through left channel for lower right and upper left quadrants

2. Pull band to your right through right channel for lower left and upper right quadrants

FIGURE 4



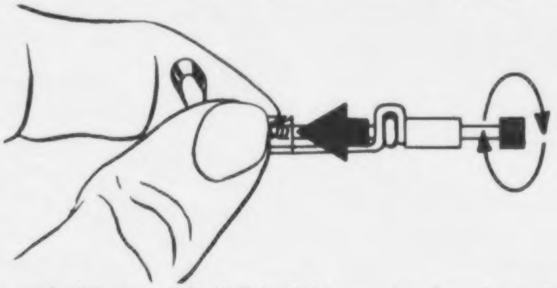
Straight Guide Channel
(Rarely Used)

Left Guide
Channel For Lower
Right and Upper
Left Quadrant

Right Guide
Channel For Upper
Right and Lower
Left Quadrant

D. Place thumb over diagonal slot, and with other hand, turn outer nut away from you until spindle is holding band securely in place (Figure 5)

FIGURE 5



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E. Adjust loop by turning inner nut away from you to make loop smaller; turn nut toward you to make loop larger

(NOTE: Always prepare band a little larger than the tooth, so it will be easier to slip on tooth. The doctor will tighten it to fit.)

OPERATIVE DENTISTRY
UNIT III

JOB SHEET #7--PREPARE TRAY SETUPS FOR AMALGAM RESTORATION MO CLASS II

I. Instruments and materials

   A. Tray I

      1. Local anesthesia
      2. Rubber dam equipment
      3. Mouth mirror
      4. Cotton pliers (2)
      5. Cotton pledgets
      6. Cavity liner (varnish)
      7. Cement, spatula, and glass slab
      8. Explorer, curved
      9. Stainless steel matrix materials, 1/2 inch wide, or preformed matrix and holder
      10. Pliers or hemostat
      11. Wooden wedge, triangular
      12. Contra-angle handpiece (CAHP), high speed
      13. Contra-angle handpiece, latch type
      14. Bur #330 FG (friction grip) carbide
      15. Bur #160 L (long) latch type carbide
      16. Bur #2-4, latch type carbide
      17. Spoon excavators, small and medium
      18. Hemostat
      19. Enamel hatchet, posterior
      20. Gingival margin trimmer, mesial (optional)
      21. Articulating paper
      22. Vacuum tip

JOB SHEET #7

B. Tray II

1. Burnisher for adaptation of the band (egg shape)
2. Wedges
3. Scissors or knife to adapt wedges
4. Amalgamator
5. Dispenser for mercury and alloy
6. Squeeze cloth or mechanical amalgam press
7. Carrier
8. Dappen dish (optional)
9. Condensers #1-4 (varied sizes, serrated)
10. Carver, Hollenback
11. Carver, proximal
12. Carver, cleoid
13. Sickle-shaped explorer
14. Articulating paper
15. Cotton rolls
16. Cotton pliers

II. Procedure

A. Gather all instruments

B. Place on trays

C. Show to instructor for approval

OPERATIVE DENTISTRY
UNIT III

JOB SHEET #8--USE AMALGAMATOR

I. Materials

A. Mechanical amalgamator

B. Capsule

C. Pestle

D. Pellets and mercury

II. Procedure

(NOTE: Do not prepare a premeasured mix more than a few hours ahead of time. Use manufacturer's instructions for ratio and time or use 1-to-1 ratio.)

A. Place required portions of mercury in capsule

B. Insert pestle

C. Place pellet(s) crosswise on top of pestle

D. Place lid on capsule

E. Insert capsule into amalgamator attachment

F. Set timer for required seconds

G. Release switch

H. Remove pestle from capsule when motor stops

I. Close capsule and return to motor

J. Triturate slightly to achieve a congealed mass

(NOTE: Always wipe out capsule after each use. Amalgam will sometimes adhere to the walls of the capsule and will result in a poor mix.)

OPERATIVE DENTISTRY
UNIT III

JOB SHEET #9--ASSIST WITH AMALGAM RESTORATION

I. Materials and instruments

   A. Tray 1 and Tray 2 from Job Sheet #7

   B. Amalgam

   (NOTE: This job sheet is written for MO Class II Tooth #30. This procedure includes the use of a cavity liner, insulating base, placing the wedging of the matrix, as well as all the steps for an amalgam restorration. This is a generalized procedure, and each dentist will have his or her own method.)

II. Procedure for assisting

   A. Seat and drape patient

   B. Hand swab stick dipped in topical anesthesia to dentist with left hand and receive with left little finger

   Example: Use spray, gel, or liquid

   C. Use right hand to pass syringe to doctor's right hand, directing bevel of needle toward the right ramus

   D. Prepare rubber dam, select clamps, and place it in rubber dam clamp forceps

   E. Place lubricant on the corners of the patient's mouth, and position left hand to receive syringe from dentist

   F. Use left hand to spray warm water into patient's mouth to remove any anesthetic that may have dropped; direct vacuum with right hand

   G. Assist with placement of rubber dam

   H. Place round bur (#2 or #4) into high speed contra-angle handpiece; pass it with left hand, bur pointed downward

   I. Observe doctor gaining entry into carious lesion

   J. Place vacuum tip to distal area of tooth, away from line of vision of dentist

   K. Pass enamel hatchet or hoe to doctor if necessary

   L. Receive hatchet and hand spoon to dentist

   M. Return enamel hatchet

JOB SHEET #9

N. Observe doctor beveling axiopulpal and axiogingival line angles and removing underlining enamel of gingival wall

O. Place a #160 long fissure bur into latch-type handpiece and pass to dentist with right hand; receive hatchet with little finger of left hand

P. Dip cotton pledget into hydrogen peroxide using cotton pliers; pass to dentist with right hand

Q. Observe dentist gently forcing pledget into cavity preparation to flush out debris

R. Receive cotton pliers and pass dry cotton pledgets to dentist

S. Observe dentist drying cavity preparation

(NOTE: Some dentists will use the water and air syringe on the final cavity preparation.)

III. Procedure for cavity liner and base

A. Dip a cotton pledget into liquid cavity liner (varnish) and pass to dentist

B. Observe dentist swabbing the cavity liner into cavity preparation

(NOTE: A few minutes is allowed for drying time.)

C. Mix calcium hydroxide cement to consistency indicated by dentist

(NOTE: This is used as an insulating base.)

D. Hand a spoon excavator to dentist with left hand, using right hand to hold the cement slab containing cement mix at chin of patient

E. Observe dentist picking up a small amount of cement and placing over area of dentin, pulpal chamber, and horns of pulp

F. Wash and dry cement slab at sink while waiting for cement base to set up, about 4 to 5 minutes

G. Hand spoon excavator to doctor

H. Observe doctor removing excess cement not needed for insulating base

IV. Procedure for placement of matrix

A. Move instrument tray close to dental chair

B. Assemble molar band into matrix retainer (holder)

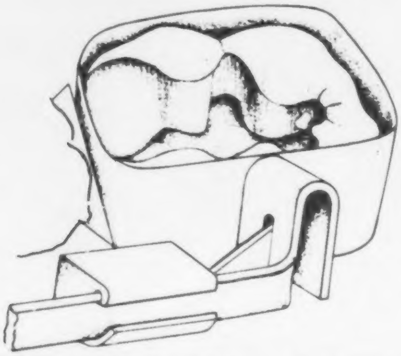
JOB SHEET #9

C. Hand retainer and band to dentist

D. Observe the dentist placing matrix band gingivally to gingival concave angle of cavity preparation (Figure 1)

(NOTE: Assistants may place matrix retainers in some states.)

FIGURE 1



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(NOTE: This is done to prevent an overhang of the condensed amalgam.)

E. Hand dentist hemostat containing wooden or plastic wedge which is at right angle to hemostat beaks

F. Observe dentist placing wedge between teeth at mesial surface of matrix band

(NOTE: The wedge must be supported by both teeth. Softened compound may be used if indicated to stabilize the wedge and matrix.)

V. Procedure for placement

(NOTE: The mix has been put into capsule and placed in the amalgamator prior to procedure. Remember trituration time on one pill ratio of alloy/ mercury is 6 to 7 seconds per pill.)

A. Set timer for trituration

B. Remove triturated amalgam from capsule

(NOTE: Remove rings before working with amalgam.)

C. Roll on fresh squeeze cloth or amalgam press

(CAUTION: Do not touch the amalgam with fingers, as moisture will contaminate the mix.)

JOB SHEET #9

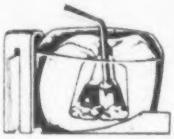
D. Hand condenser (small end first) to dentist

E. Load amalgam into carrier and dispense the mass into pulpal area of cavity preparation

F. Continue to load and dispense amalgam

G. Observe dentist condensing amalgam in cavity preparation (Figures 2 and 3)

FIGURE 2



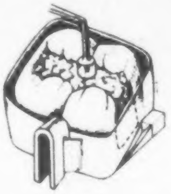


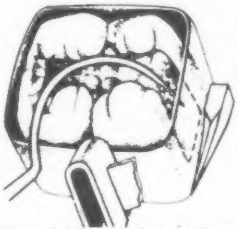
FIGURE 3

H. Receive condenser with left hand

I. Hand dentist explorer with right hand

J. Observe dentist trimming excess amalgam from margins of matrix band (Figure 4)

FIGURE 4



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K. Hand dentist cotton pliers (hemostat) to remove wedge

L. Observe dentist loosening matrix retainer

VI. Procedure for carving amalgam

A. Receive explorer with left hand and pass discoid carver with right hand

B. Observe dentist trimming off excess amalgam from cavosurface margin

C. Receive discoid and hand lock pliers or hemostat

D. Observe dentist carefully removing band in an upward motion

E. Receive pliers and band with left hand and pass explorer to dentist with right hand

(NOTE: The dentist may use a Hollenback carver or marginal trimmer at this point to carve proximal areas, depending on tooth and other factors.)

JOB SHEET #9

F. Receive explorer with left hand and pass carver of dentist's choice with right hand

Examples: Discoid, cleoid, Hollenback carvers

G. Observe dentist carving anatomical grooves in occlusal surface

H. Receive carver with left hand

I. Assist dentist with removal of rubber dam and place on tray

J. Pass hemostat (cotton pliers) with a strip of articulating paper in place to dentist

(NOTE: This is done so dentist can check occlusion in high places in the restored tooth.)

K. Pass carver if indicated for carving any high points on restoration

L. Use a tissue to wipe patient's mouth and face to remove any lubricant or debris

M. Instruct patient to favor restoration for a few hours

Example: Chew on other side of mouth

N. Dismiss patient and appoint patient for polishing amalgam any time after twenty-four hours

O. Clean operatory and prepare for next patient

(NOTE: This includes preparing instruments for the sterilizer.)

OPERATIVE DENTISTRY
UNIT III

JOB SHEET #10--ASSIST WITH POLISHING AMALGAM

I. Materials

- A. Basic tray setup
- B. Right-angle handpiece (RAHP)
- C. Prophy brush and rubber cup
- D. Finishing strips
- E. Dental tape or floss
- F. Finishing stones and discs
- G. Mandrel
- H. Pumice in dappen dish (fine tin oxide or triple)

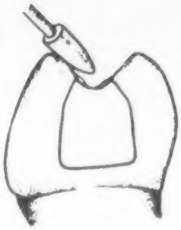
(NOTE: The patient has returned after a minimum of 24 hours.)

II. Procedure

- A. Pass mouth mirror and explorer to dentist
- B. Observe dentist checking margins and contact areas
- C. Place finishing stone in right-angle handpiece (RAHP)
- D. Receive instruments in left hand and pass RAHP (Figure 1)

(NOTE: Expanded function dental assistants will finish and polish the amalgam restoration.)

FIGURE 1



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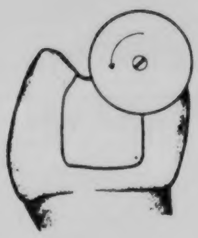
JOB SHEET #10

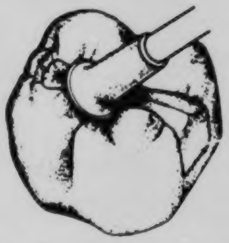
E. Hand dentist disc and receive finishing stone (Figure 2)

FIGURE 2



F. Receive disc and hand dentist rubber cup (Figure 3)

FIGURE 3



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G. Hold pumice in dappen dish in reach of dentist

H. Use water spray and vacuum as indicated

I. Dismiss patient

J. Clean operatory

OPERATIVE DENTISTRY
UNIT III

TEST

NAME ______________________ SCORE ______________

1. Match terms associated with operative dentistry to the correct definitions. Write the correct numbers in the blanks provided.

_____a. Mechanical mixing of silver and mercury

_____b. Small cotton pellet used to carry medication into tooth preparation

_____c. Process of refining anatomical landmarks

_____d. Localized channel within a cavity preparation

_____e. Degree of thickness of a fluid

_____f. Removal of caries and hard tissue in order to shape tooth for a restoration

_____g. Placing and adapting a small shaped object on the side of a matrix to stabilize it

_____h. Involves prevention and restoration of defective enamel and dentin

_____i. Kneading and rolling amalgam briefly until it becomes a homogenized mass

_____j. Device placed near or around cavity preparation to provide missing wall of tooth during condensation

_____k. Combination of an alloy with mercury; silver or copper alloy triturated with mercury makes up an amalgam

_____l. Process of compressing restorative material into cavity preparation

_____m. Aids teeth in resisting decay; effective in drinking water or direct application on teeth

1. Operative dentistry
2. Cavity preparation
3. Pledget
4. Matrix (retainer)
5. Trituration
6. Viscosity
7. Wedging
8. Undercut
9. Mulling
10. Finishing
11. Condensation
12. Fluoride
13. Amalgamation

_____ n. Strength of a substance expressed in terms of pressure necessary to crush a unit of such substance

_____ o. Used to strengthen or restore badly broken down teeth, fractures, or to correct occlusal relationship

_____ p. Mechanical device used to combine alloy with mercury, or may be ground glass, mortar and pestle

_____ q. Substance (enzyme) that begins a chemical reaction

_____ r. Combination of any metal or alloy with mercury

_____ s. End of instrument used directly in preparation

_____ t. Used interproximally to reduce and polish proximal surfaces of new restorations

_____ u. Sheet of rubber used to isolate teeth during operative procedure

14. Amalgamator
15. Amalgam
16. Crushing strength
17. Catalyst
18. Abrasive strips
19. Cast gold
20. Working end
21. Rubber dam

2. State the purposes of operative dentistry.

a. ______________________________

b. ______________________________

c. ______________________________

3. Select from the list below duties of the dental assistant during operative procedures. Mark each correct answer with an "X."

_____ a. Prevents cross-contamination

_____ b. Prepares a cavity outline

_____ c. Provides two additional hands which keep dentist at work in mouth

_____ d. Asks patient to hold suction tip

_____ e. Assists dentist in accomplishing procedures as quickly and smoothly as possible

_____ f. Assists dentist in accomplishing moisture control

_____ g. Acquires complete knowledge of materials and instruments

4. Select from the list below steps in chairside assisting. Mark each correct answer with an "X."

______a. Use verbal commands

______b. Develop a "code" or silent communication with dentist

______c. Keep field of operation free from debris

______d. Anticipate dentist's needs

______e. Remove debris only at end of procedure

______f. Remember procedures and instrumentation for each operation

______g. Pass and receive instruments at eye level

______h. Pass and receive instruments in front of patient's chin whenever possible

5. State guidelines for arranging instruments on trays.

a. ____

____

b. ____

____

c. ____

____

d. ____

____

e. ____

____

6. Match types of restorative materials to their correct placement. Write the correct numbers in the blanks provided. There may be more than one correct answer per blank.

______a. Posterior teeth

______b. Anterior teeth

1. Composite
2. Amalgam
3. Cast gold

7. Match types of cements to their principal and secondary uses. Write the correct number in blanks provided.

_____a. Principal uses are temporary restorations, pulp capping, and thermal insulating bases; secondary uses are root canal restorations and cementing agent for indirect restorations

_____b. Principal uses are pulp capping and thermal insulating bases

_____c. Principal uses are cementing agent for indirect and orthodontic bands; secondary uses are temporary restorations and luting agent for orthodontic appliances

1. Zinc phosphate
2. Zinc oxide eugenol
3. Calcium hydroxide

8. Select from the list below chemical components of amalgam. Mark each correct answer with an "X."

_____a. $CA\ H_4O^2$

_____b. 2% mg.

_____c. 2% zinc

_____d. 1% lead

_____e. 25% tin

_____f. 6% copper

_____g. 15% manganese

_____h. 65% silver

9. Select from the list below mercury specifications for dental use. Mark each correct answer with an "X."

_____a. Shows phenol coefficient

_____b. Labeled for weight content

_____c. Mirror-like surface, bright and free from scum

_____d. Dispensed in liquid mass

_____e. Properly distilled and free from residues

_____f. Requires no safety specifications

10. Name sources of moisture while placing an amalgam.

a. ______________________________

b. ______________________________

c. ______________________________

11. Describe delayed expansion and its effects.

a. Delayed expansion--____

____

____

b. Effects--____

____

____

____

12. Select from the list below reasons for polishing an amalgam restoration. Mark each correct answer with an "X."

_____a. Secures cavity by overhanging margins

_____b. Increases resistance to corrosion

_____c. Aids in reducing frequency of prophys

_____d. Increases length of service

_____e. Reduces surface roughness

13. Arrange in order steps in acid etching of a tooth. Write a "1" to indicate the first step, a "2" to indicate second step, and so on.

_____a. Select shade of restorative material

_____b. Place restorative material

_____c. Apply acid etch bonding agent

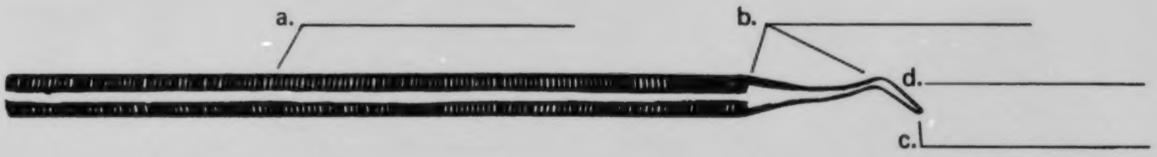
_____d. Determine which tooth needs to be restored

14. Distinguish between purpose of cavity base and cavity liner. Write a "B" to indicate cavity base and an "L" to indicate cavity liner.

_____a. Covers walls and floor of cavity; used as a protective layer before placement of base

_____b. Used to encourage recovery of pulp and protect pulp against mechanical or thermal trauma

15. Identify design parts of a hand instrument shown in the drawing below. Write the correct names in the blanks provided.



Handle   Cutting edge or face   Blade or nib   Shank

16. Match formula numbers of instruments to their descriptions. Write the correct numbers in the blanks provided.

______a. Length of blade in millimeters	1. First number
______b. Width of blade in tenths of millimeters	2. Second number
______c. Angle of blade to shaft in centigrades	3. Third number
______d. Angle of blade with long axis of the shaft	4. Fourth number

17. Match cutting instruments shown on the next page to their uses. Write the correct number in the blanks provided. Some blanks may have more than one correct answer.

______a. Used to smooth or form line angles of axial wall of Class II cavities

______b. Excavate decay, especially when close to pulp; carve amalgam restorations

______c. Used to place bevel on gingival margin wall in Class II cavity

______d. Used for planing down enamel surface in Class III or IV cavity (anterior)

______e. Form line angles of mesial or distal surfaces in Class II cavity

______f. Used to form interior detail of all cavities, mostly Class III and V; used in scraping, planing, and direct cutting motion

______g. Used in same manner as straight chisels

______h. Used to form interior detail in all classes of cavities _____i. Used to make definite point angles and sharpen line angles in Class III or V cavities; used to carve cavo-surface bevels

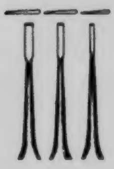
_____j. Used only in Class III, IV, and V cavity preparations

_____k. Used primarily as a carver on Class I, II, and V cavities

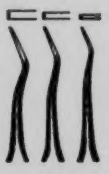
_____l. Used to plane mesial and distal axial walls of posterior teeth

_____m. Used primarily as a carver on Class I, II, and V cavities

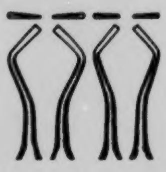
1.



2.



3.



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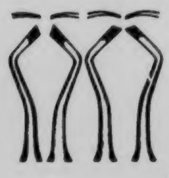
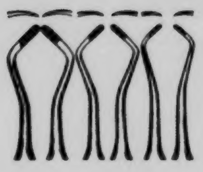
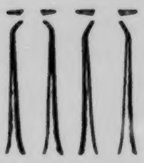


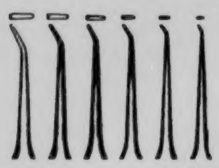
5.



6.



7.



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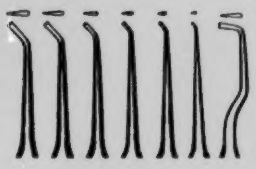
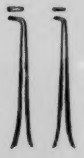
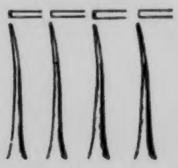


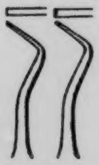
9.



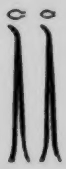
10.



11.



12.



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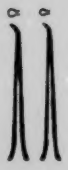


18. Match other types of instruments to their uses. Write the correct numbers in the blanks provided.

_____ a. Used to plug and carve porcelain restorations

_____ b. Used to condense amalgam into prepared cavity

_____ c. Used to carry amalgam to prepared cavity with more proficiency

_____ d. Used to carry composite to cavity

_____ e. Used to carve amalgam restorations

_____ f. Used to fill composite restorations

_____ g. Used to trim restorative materials, mainly interproximally

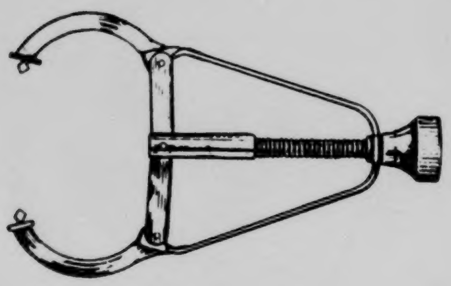
_____ h. Used to carry amalgam to prepared cavity

_____ i. Used to shape, spoon, and polish

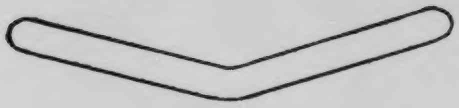
1. Marginal finishing knife
2. Amalgam plugger (condenser)
3. Burnisher
4. Amalgam carrier
5. Amalgam carrier (improved type)
6. Frahm amalgam carver
7. Beaver tail burnisher
8. Plastic filling instrument
9. Composite carrier

19. Identify types of dental matrices shown in drawings below and on the next pages. Write the correct names in the blanks provided.

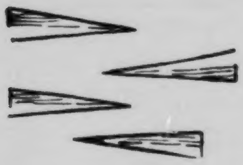
Tofflemire universal retainer
Half-round molar band
Matrix contouring instrument
Half-round cuspid
Ivory #1 retainer
Distal and buccal extension strips
Matrix wedges
Tofflemire contra-angle retainer
Universal plain matrix band
T bands



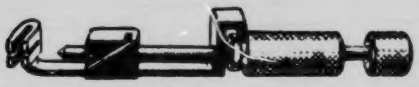
a. ______________________________



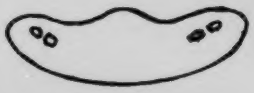
b. ______________________________



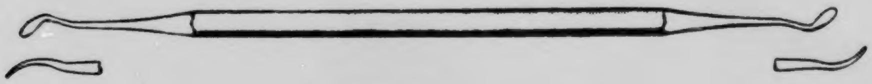
c. ______________________________



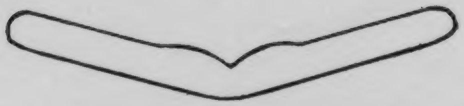
d. ______________________________



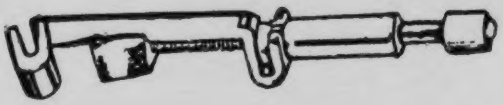
e. ______________________________



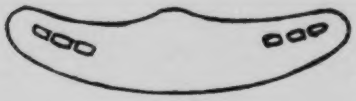
f. ______________________________



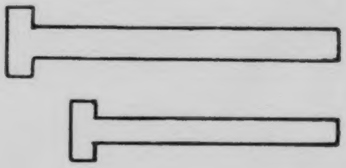
g. ____________________



h. ____________________



i. ____________________



j. ____________________

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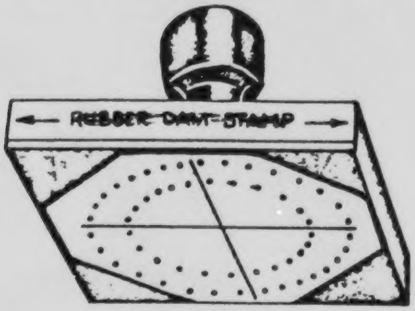
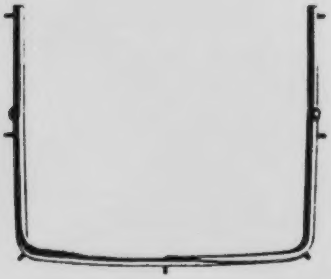
20. Identify types of equipment used in rubber dam placement from the illustrations below. Write the correct names in the blanks provided.

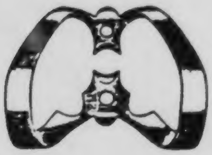
Beaked molar clamp
Metal frame
Plastic frame
Adult molar clamp
Rubber dam forcep
Cervical clamp
Rubber dam stamp
Rubber dam punch
Labial clamp



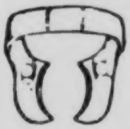
a. ______________________________



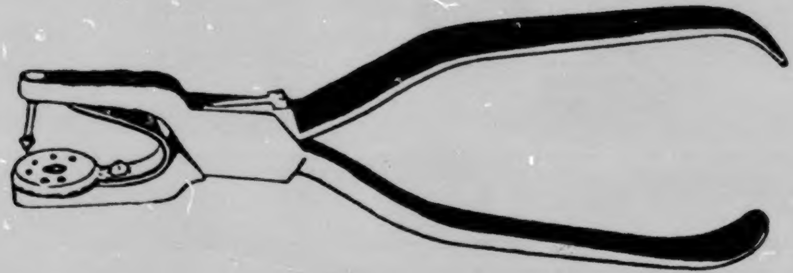
b. ______________________________



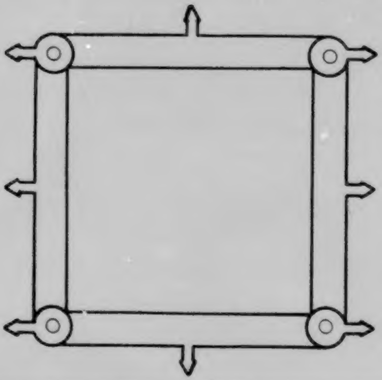
c. ______________________________



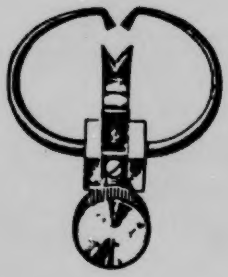
d. ______________________________



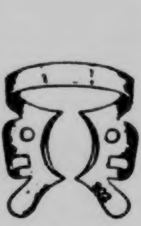
e. ____________________



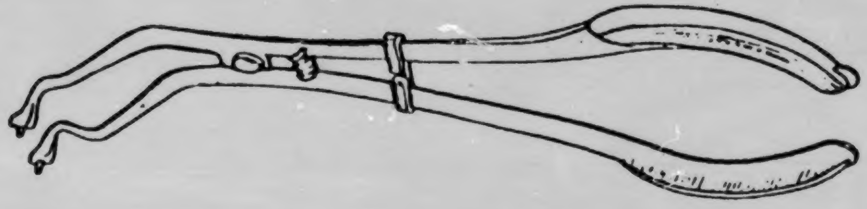
f. ____________________



g. ____________________



h. ____________________



i. ______________________________

21. Select from the list below purposes of the rubber dam. Mark each correct answer with an "X."

______a. Moisture control

______b. Increase operating efficiency

______c. Apply very hard pressure on tooth

______d. Access and visibility

______e. Prohibit patient conversation

______f. Patient management and protection

22. Demonstrate the ability to:

a. Apply rubber dam.

b. Prepare a calcium hydroxide cavity base.

c. Mix a carboxylate cement.

d. Mix a zinc phosphate cement.

e. Prepare basic anterior composite tray set-up.

f. Prepare matrix retainer.

g. Prepare tray setups for amalgam restoration MO Class II.

h. Use amalgamator.

i. Assist with amalgam restoration.

j. Assist with polishing amalgam.

(NOTE: If the above activities have not been finished before the exam, ask your instructor when they should be completed.)

OPERATIVE DENTISTRY
UNIT III

ANSWERS TO TEST

1. a. 5

   b. 3

   c. 10

   d. 8

   e. 6

   f. 2

   g. 7

   h. 1

   i. 9

   j. 4

   k. 13

   l. 11

   m. 12

   n. 16

   o. 19

   p. 14

   q. 17

   r. 15

   s. 20

   t. 18

   u. 21

2. a. Prevention and restoration of defects in enamel and dentin

   b. Diagnosis and prevention of recurring caries

   c. Surgical and mechanical measures of restorative procedures

3. a, c, e, g

4. b, c, d, f, h

5. a. Place hand instruments on left side of tray from bottom to top (or left to right) according to sequence of use

   b. Place pen grasp instruments with working end toward right side and top of tray

   c. Place palm grasp instruments toward left side (or bottom) of tray

   d. Place instruments to be transferred to doctor's left hand with working ends to left (or bottom) of tray

   e. Place other instruments to be used with left hand on tray with working ends toward right (or top) of tray

6. a. 2 and 3
   b. 1

7. a. 2
   b. 3
   c. 1

8. c, e, f, h

9. b, c, e

10. a. Condensing instruments
    b. Hands and fingers
    c. Saliva

11. Discussion should include:
    a. Delayed expansion--Trapped gas within mass of amalgam that exerts pressure
    b. Effects
       1) Overhanging margins
       2) Recurring caries
       3) Corrosion and possible post-operative pain from pressure

12. b, d, e

13. a. 2
    b. 4
    c. 3
    d. 1

14. a. L
    b. B

15. a. Handle
    b. Shank
    c. Cutting edge or face
    d. Blade or nib

16. a. 2
b. 1
c. 3
d. 4

17. a. 2
b. 5
c. 4
d. 1
e. 3
f. 7
g. 10
h. 8
i. 6
j. 9
k. 12 or 13
l. 11
m. 12 or 13

18. a. 7
b. 2
c. 5
d. 9
e. 6
f. 8
g. 1
h. 4
i. 3

19. a. Ivory #1 retainer
b. Universal plain matrix band
c. Matrix wedges
d. Tofflemire universal retainer
e. Half-round cuspid
f. Matrix contouring instrument
g. Distal and buccal extension strip
h. Tofflemire contra-angle retainer
i. Half-round molar band
j. T bands

20. a. Rubber dam stamp
    b. Metal frame
    c. Labial clamp
    d. Adult molar clamp
    e. Rubber dam punch
    f. Plastic frame
    g. Cervical clamp
    h. Beaked molar clamp
    i. Rubber dam forcep

21. a,b,d,f

22. Performance skills evaluated to satisfaction of instructor

PEDODONTICS
UNIT IV

UNIT OBJECTIVE

After completion of this unit the student should be able to use appropriate charting procedures in pedodontics. The student should also be able to apply topical fluorides and pit and fissure sealant. The student should be able to assist with pedodontic procedures. This knowledge will be evidenced by completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with pedodontics to their correct definitions.
2. Select from a list purposes of pedodontics.
3. Select from a list anatomical differences of deciduous teeth from permanent teeth
4. Select from a list diagnostic aids used in pedodontics.
5. Distinguish between charting methods used in pedodontics.
6. Describe pulp capping for deciduous teeth.
7. State methods of controlling fears in children.
8. Describe characteristics of different age groups.
9. Select from a list types of dental emergencies.
10. Select from a list purposes of stainless steel crowns.
11. State reasons for using stainless steel crown.
12. Distinguish between types of space maintainers.
13. Chart deciduous teeth using Universal and Palmer systems.
14. Use correct pedodontic management words.
15. Demonstrate the ability to:
    a. Prepare child for dental exam.
    b. Apply topical fluorides.
    c. Apply pit and fissure sealant.
    d. Assist with pulpotomy.
    e. Apply stainless steel crown on study model.

PEDODONTICS
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Order film.

   B. Make transparencies.

   C. Provide student with objective sheet.

   D. Provide student with information, assignment, and job sheets.

   E. Discuss unit and specific objectives.

   F. Provide student with equipment and materials for assignment and job sheets.

   G. Demonstrate and discuss assignment and job sheets.

   H. Invite a pedodontist to speak with class on management of children.

   I. Share your experiences working with children with class.

      Example: Biting fingers, using silk glove

   J. Role play a child not wanting to get into the dental chair.

   K. Demonstrate different sizes of forceps used for extractions of deciduous teeth.

   L. Show students radiographs of fractured teeth.

      (NOTE: If you do not have any broken teeth, borrow some from your dental office.)

   M. Lead a discussion on drugs used in pedodontics.

      Example: Elixir

   N. Demonstrate charting in detail, or as much as you would prefer the student to know.

   O. Lead a discussion on working with handicapped children. Use sheet on next page to evaluate student attitudes toward handicapped children.

      Example: Retarded child

   P. Give test.

ATTITUDE TOWARD THE HANDICAPPED CHILD IN THE DENTAL OFFICE

Do understand the handicapped child

Empathy not pity is a must

Never underrate the handicapped child

Treat the handicapped child as an individual

Ability not inability is the most important

Love without shame is what the handicapped child wants

Assist without being sorrowful

Smile with him as you would any other

Share with him as you would any other

Interest in him is an asset to you

Special attention with a realistic attitude is essential

Take time to talk to him

Alert yourself to his needs

Never neglect any opportunity to reassure him

TRUTH IS--HE IS NOT HANDICAPPED, ONLY INCONVENIENCED

QUEMBE LANE

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Transparency masters

    1. TM 1--Comparison of Deciduous and Adult Pulp

    2. TM 2--Universal Chart

    3. TM 3--Palmer Chart

  D. Assignment sheets

    1. Assignment Sheet #1--Chart Deciduous Teeth Using Universal and Palmer Systems

    2. Assignment Sheet #2--Use Correct Pedodontic Management Words

  E. Job sheets

    1. Job Sheet #1--Prepare Child for Dental Exam

    2. Job Sheet #2--Apply Topical Fluorides

    3. Job Sheet #3--Apply Pit and Fissure Sealant

    4. Job Sheet #4--Assist With Pulpotomy

    5. Job Sheet #5--Apply Stainless Steel Crown on Study Model

  F. Test

  G. Answers to test

III. Unit references:

  A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W. B. Saunders Co., 1976.

  B. Strickland, William D., and Baker, Benjamin R. *Dental Assisting, Course VII: Clinical Application.* 3rd ed., Chapel Hill: University of North Carolina, 1980.

  C. Strickland, William D., and Baker, Benjamin R. *Dental Assisting, Course V: Clinical Sciences.* 3rd ed., Chapel Hill: University of North Carolina, 1980.

IV. Films:

  A. "Child Behavior." 38 min., Available from National Medical Audiovisual Center (Annex), Station K, Atlanta, GA 30324.

  (NOTE: This film, which discusses management of children in the dental office, is available on a free-loan basis.)

B. "Dental Pulp Disease." 29 min., Available from National Medical Audiovisual Center (Annex), Station K, Atlanta, GA 30324.

(NOTE: This film deals with diagnosis and case selection.)

PEDODONTICS
UNIT IV

INFORMATION SHEET

I. Terms and definitions

A. Pedodontics--Area of dental practice limited to children

B. Pontic--Artificial tooth

Examples: Used in a space maintainer, used in a bridge

C. Pulp capping--Placing a protective dressing over the sensitive or exposed pulp

D. Pulpotomy--Removal of vital portion of tooth pulp

E. Bite plane--Apparatus designed to encourage lingual position of an incisor to move facially

F. Crown--Covers anatomical portion of a tooth

G. Matrix--Provides form or retention of restorative material

H. Bifurcation-To branch or divide into two

I. Formocresol--Caustic agent used in pulp capping

J. Aesthetics--Qualities involved in appearance of a restoration

K. Artificial teeth--Full or partial denture or bridgework

L. Base for filling--Cement or protective material placed over pulpal area of tooth to reduce thermal shock

M. Anatomical--Pertaining to anatomy or structure

II. Purposes of pedodontics

A. Provide a program of complete oral health care during developmental periods

B. Manage unpredictable behavior during visits

C. Perform restorative techniques, especially for children

D. Perform pulpal therapy for deciduous and permanent teeth

E. Diagnose and treat congenital and developmental anomalies

F. Administer preventive procedures

INFORMATION SHEET

III. Anatomical differences of deciduous teeth from permanent teeth (Transparency 1)

- A. Smaller in all dimensions
- B. Thinner enamel cap
- C. More consistent in depth of crown
- D. Have higher pulp horns in molars
- E. Proportionally larger pulp chamber
- F. Wide flare on roots
- G. Lighter in color

  (NOTE: Primary teeth are lighter in color because they contain less dentin.)

IV. Diagnostic aids used in pedodontics

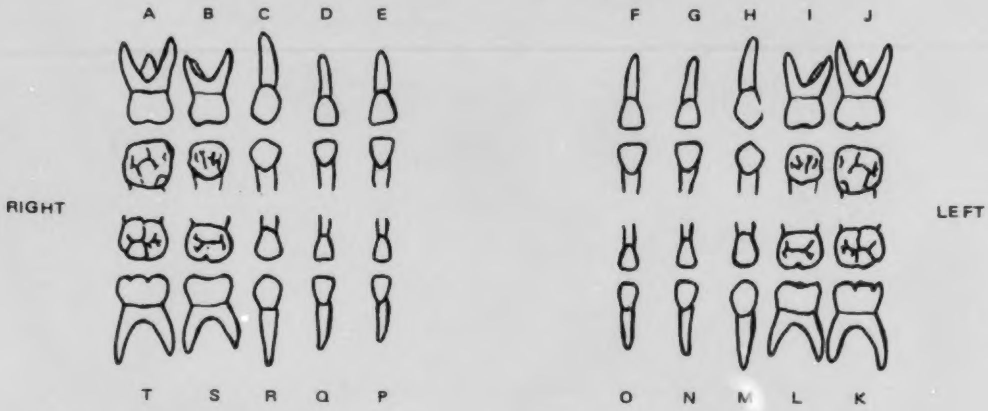
- A. Oral examination
- B. Radiographs
- C. Study models
- D. Saliva test

INFORMATION SHEET

V. Charting methods used in pedodontics (Transparency 2, Assignment Sheet #1)

A. Universal (military) (Transparency 2, Assignment Sheet #1)

(NOTE: This type of chart is used on all insurance forms.)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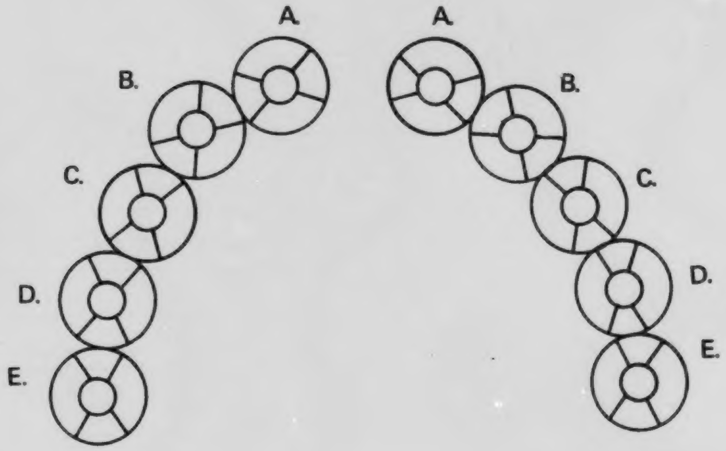
B. Palmer (Transparency 3, Assignment Sheet #1)

(NOTE: This type of chart is also used in orthodontics.)


A
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INFORMATION SHEET

VI. Pulp capping for deciduous teeth

A. Purposes

1. Protect exposed healthy pulp
2. Encourage pulp to recover

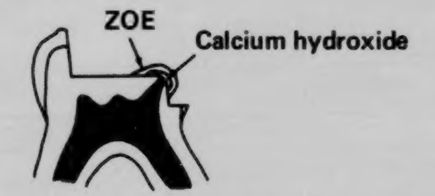
B. Reasons

1. Excavation of deep carious lesions
2. Accidental mechanical exposure

(NOTE: Accidental mechanical exposure happens when a child moves, causing the rotating burr to penetrate too deep, thus exposing the pulp horn.)

C. Procedure

1. Seal exposure with layer of calcium hydroxide product
2. Layer coat of zinc oxide eugenol (z.o.e.) to hold calcium hydroxide in place



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(NOTE: Sometimes in badly damaged pulp the z.o.e. will be left as a temporary filling for two weeks. If the tooth stays vital, it will then be filled or capped.)

D. Risk--Recovery of pulp is not always successful

(NOTE: Pulp capping is considered to have the best chance of success if pulp damage is mild.)

VII. Methods of controlling fears in children

A. Inform child of purpose of dentistry

Example: The dentist looks at your teeth and fixes cavities

INFORMATION SHEET

B. Introduce use of equipment

C. Explain procedure

D. Stress truth

(NOTE: The child should be told honestly if something is going to hurt. If an injection is given, explain it will feel kind of like a little bee sting.)

VIII. Characteristics of different age groups

A. 2-to-3 year old

1. Accepts mother's absence for short periods of time
2. Good time to introduce dental care
3. Follows instructions for short periods of time

(NOTE: This is the age when the child shows a preference in food. Good snack foods should be introduced at this time.)

B. 3-to-6 year old

1. Becomes fairly independent
2. Is constantly active and alert
3. Has longer attention span

C. 6-to-9 year old

1. Is curious and eager to learn
2. Strives to please others
3. Is sensitive to criticism

D. 9-to-12 year old

1. Is nervous and fidgety
2. Is congenial and well-behaved
3. Cannot be expected to always behave as desired

INFORMATION SHEET

IX. Types of dental emergencies

- A. Teeth pushed up into alveolus
- B. Dislocated tooth

  (NOTE: If a tooth has been knocked free of the mouth, the dentist will want to check the fractured remains to see if the tooth can be placed back into the original socket and stabilized with a splint. Advise patient to bring tooth wrapped in mild saline solution.)

- C. Fractured incisors or centrals
- D. Injury to oral mucosa or gingiva

  (NOTE: Depending on type of emergency, the dentist may apply a z.o.e. pack for pain, administer a sedative, and ask patient to return.)

X. Purposes of stainless steel crowns

- A. Used following pulpal therapy
- B. Used for rampant caries on three or more surfaces
- C. Restore teeth for handicapped children

  (NOTE: This applies to children who are unable to care for their own teeth.)

XI. Reasons for using stainless steel crown

- A. Lack of sufficient tooth structure to use amalgam
- B. Provides a suitable substitute for cast gold

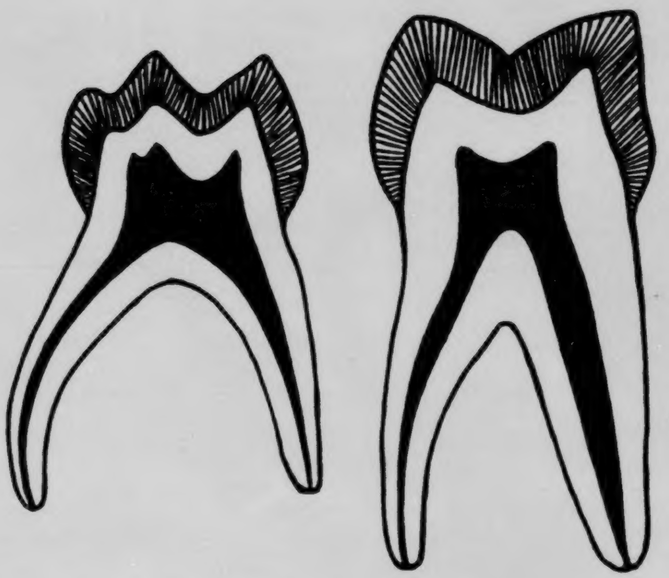
  Example: Fractured deciduous tooth that will be replaced by a permanent tooth

XII. Types of space maintainers

(NOTE: There are other uses for space maintainers but only these will be discussed in this unit.)

- A. Fixed maintainers--Used to guide first permanent molars into position
- B. Removable maintainers--Prevent normal shifting of teeth

Comparison of Deciduous and Adult Pulp



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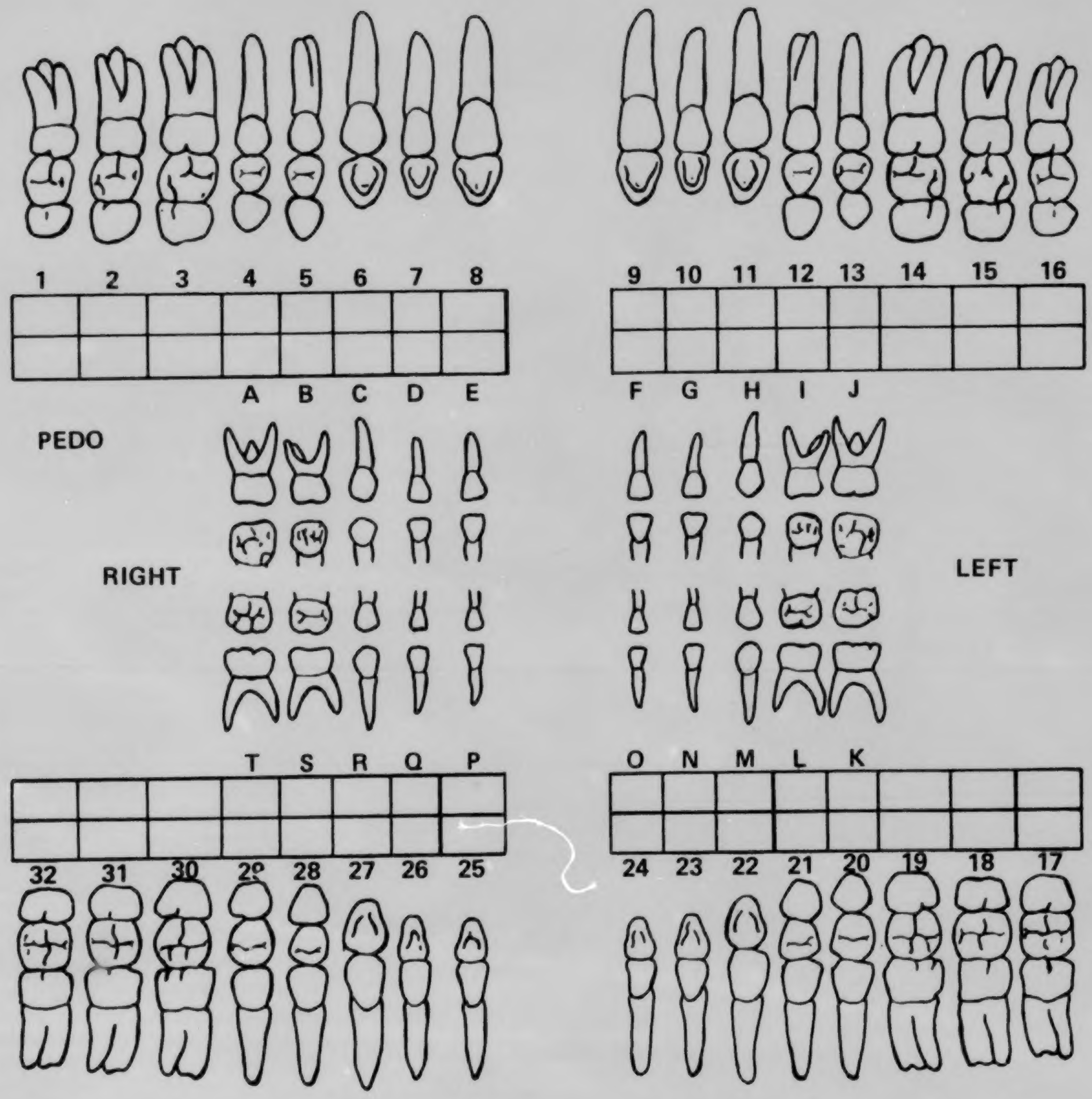
Universal Chart


1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
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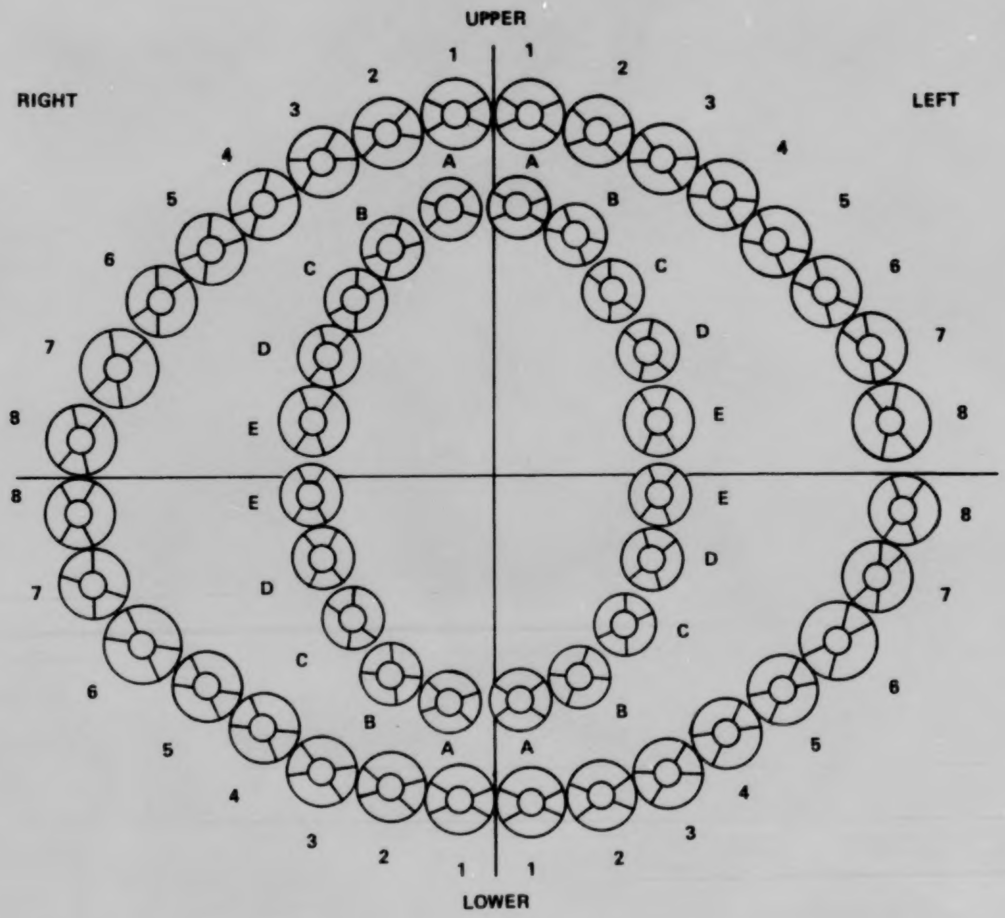
O N M L K
32 31 30 29 28 27 26 25
24 23 22 21 20 19 18 17

Palmer Chart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PEDODONTICS
UNIT IV

ASSIGNMENT SHEET #1–CHART DECIDUOUS TEETH USING UNIVERSAL AND PALMER SYSTEMS

NAME______________________________ SCORE____________________

There are two charting procedures used often in pedodontics: Universal (Military) and Palmer. Although charting in pedodontics is basically the same as in adult dental charting, there are two primary differences: style of chart and number of teeth.

It is very important that you learn to chart deciduous teeth with speed and accuracy.

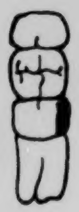
PART I

Chart the deciduous teeth listed below using the Universal (Military) method. Use the chart on the following page.

Tooth A--M
Tooth B--MOD
Tooth C--OK
Tooth D--MD
Tooth E--D
Tooth F--OK
Tooth G--MD
Tooth H--MOD
Tooth I--MOD

Tooth K--D
Tooth L--M
Tooth M--OK
Tooth N--MD
Tooth O--M
Tooth P--MD
Tooth Q--OD
Tooth R--OM

Example: Tooth A

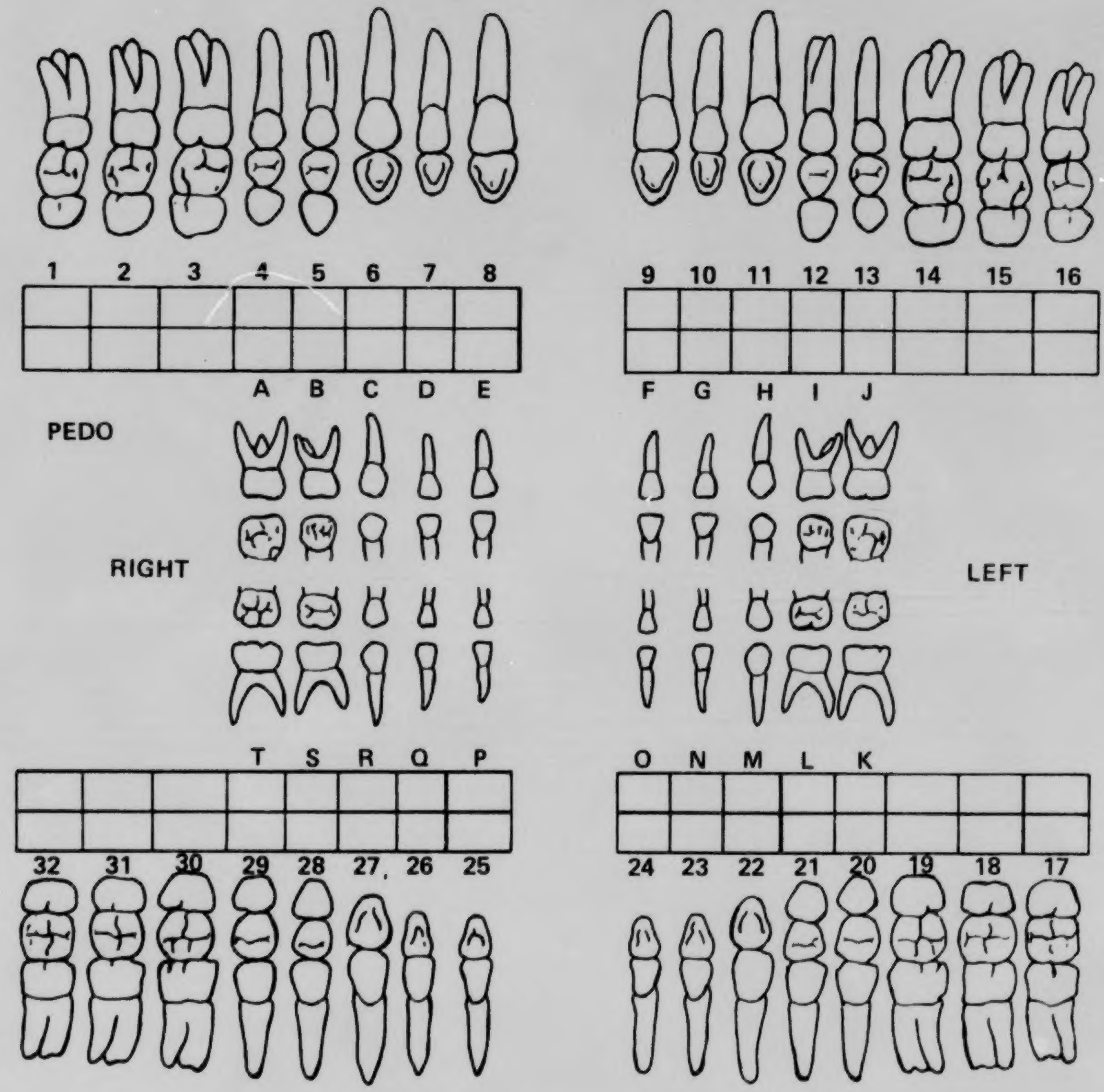


(NOTE: An "OK" means there are no cavities.)

DA - 221-F

ASSIGNMENT SHEET #1

Universal Chart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A B C D E
F G H I J
PEDO
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LEFT
T S R Q P
O N M L K
32 31 30 29 28 27 26 25
24 23 22 21 20 19 18 17

ASSIGNMENT SHEET #1

PART II

Chart the deciduous teeth listed below using the Palmer method. Use the chart on the following page.

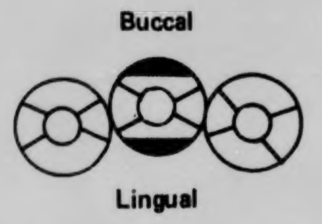
A. Upper right
- Tooth A--BD
- Tooth B--MD
- Tooth C--M
- Tooth D--D
- Tooth E--MD

B. Lower right
- Tooth E--D
- Tooth D--DO
- Tooth C--MD
- Tooth B--M
- Tooth A--D

C. Upper left
- Tooth A--OK
- Tooth B--OK
- Tooth C--MD
- Tooth D--MDO
- Tooth E--OD

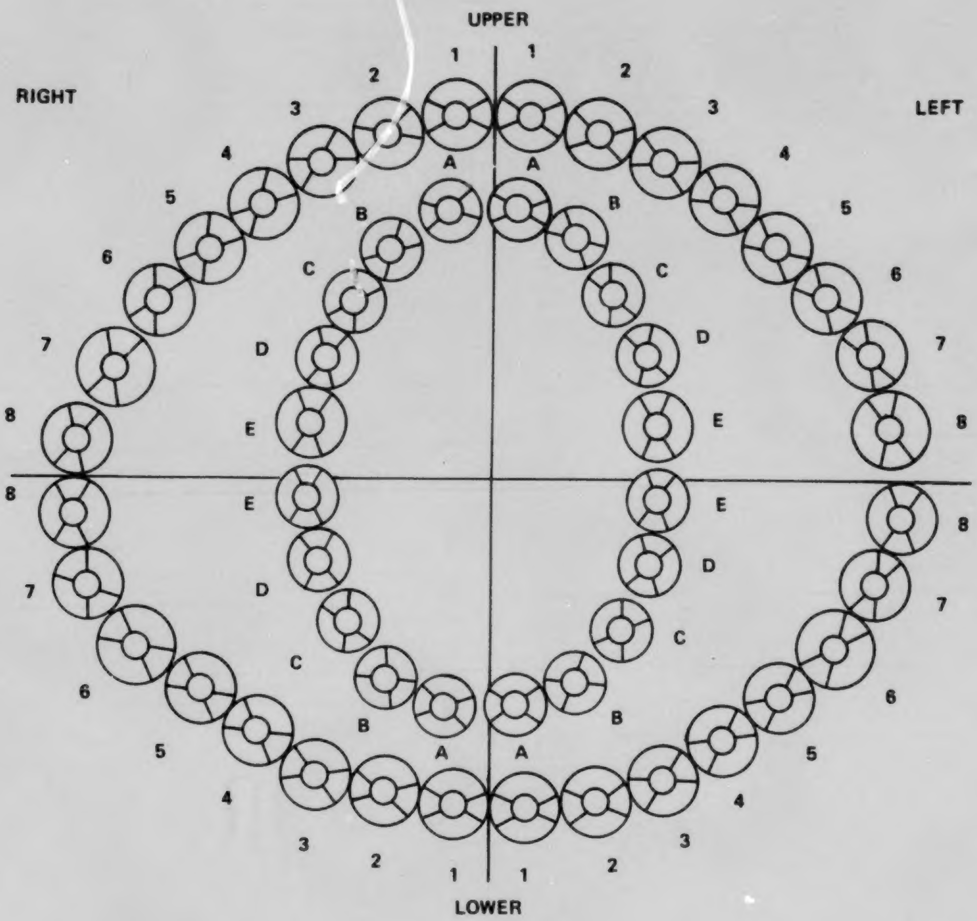
D. Lower left
- Tooth E--MOD
- Tooth D--OD
- Tooth C--BD
- Tooth B--LM
- Tooth A--D

Example: BL



ASSIGNMENT SHEET #1

Palmer Chart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PEDODONTICS
UNIT IV

ASSIGNMENT SHEET #2--USE CORRECT PEDODONTIC MANAGEMENT WORDS

NAME______________________________ SCORE__________

The type of words you use when working with children can be very helpful to the child, the doctor, and yourself. The use of careful language and a calm and pleasant manner can make the difference between a child who is well-behaved and one who is fearful and difficult to control.

PART I

Note the more positive words you can use in the list below.

NEGATIVE	PREFERABLE
Suction	Vacuum, removing water
Don't, no, stop	We'd rather you do this
Baby, terrible	Doing fine, thank you
Acting horrible	Much better
You're afraid	Real fine, splendid
Feel bad, hurt	Up-tight
Pain	Can you relax
Drill	Feel pressure, tickle brush
Filling	Cavity removed
Spit	Empty or clean mouth
X-ray machine	Take pictures
Pull out	Remove tooth
Shot	Sleepy air, mosquito bite

PART 2

Practice filling in the preferable words in the space provided below. Try to think of some other terms that are less likely to cause anxiety.

NEGATIVE	PREFERABLE
Suction	
Don't, no, stop	
Baby, terrible	
Acting horrible	
You're afraid	
Feel bad, hurt	
Pain	
Drill	
Filling	
Spit	
X-ray machine	
Pull out	
Shot	

PEDODONTICS
UNIT IV

JOB SHEET #1--PREPARE CHILD FOR DENTAL EXAM

I. Equipment

   A. Dental napkin

   B. Neck chain

   C. Tissue

   D. Hand mirror

   E. Basic tray setup

II. Procedure for seating child patient

(NOTE: The operatory must be clean, radiographs in view box, and dental chart reviewed and in holder before inviting patient in for exam.)

   A. Enter reception room and call child by name

   Example: "Jack, it is your turn now."

   B. Extend your hand if child is hesitant

   C. Lower dental chair to lowest level for child to step into

   D. Raise chair and explain you are taking him or her for a ride

III. Procedure for familiarization

   A. Explain that you are going to put the napkin on to keep the pretty shirt clean

   B. Explain basic setup and give hand mirror to child

   C. Use show-and-tell method to introduce child to equipment

   Examples: Mouth mirror used for doctor to see your pretty teeth or for doctor to see if you have any cavities

   Explorer used to scratch on tooth if doctor needs to

   Cotton plier just holds some small cotton to wipe saliva from tooth

   D. Use air syringe to blow air on hand to show child how funny air feels

   E. Demonstrate water syringe in cuspidor

   F. Step on rheostat for child to listen to sound of motor

JOB SHEET #1

G. Introduce doctor to child

Examples: "Doctor, this is Jackie."
"Jackie, this is Dr. Jones."

H. Tell doctor, "Jackie has come to see if he has any cavities."

I. Let the doctor take over

J. Assist only when needed with conversation

PEDODONTICS
UNIT IV

JOB SHEET #2--APPLY TOPICAL FLUORIDES

I. Equipment

- A. Explorer
- B. Mouth mirror
- C. Mouthwash
- D. Dental floss (unwaxed)
- E. Dappen dish
- F. Prophy paste
- G. Right-angle handpiece (RAHP)
- H. Rubber cup attachment for (RAHP)
- I. Flourides (stannous and sodium)
- J. Cotton rolls
- K. Topical applicator (cotton swabs)
- L. Trays (assorted pedo)
- M. Saliva ejector

II. Procedure for prophy

NOTE: Use a classmate to practice this procedure.)

A. Seat and drape patient

B. Examine child's mouth

(NOTE: This is done to make sure there are no sensitive areas or sore lesions.)

C. Attach rubber cup to right-angle handpiece

D. Place rubber cup in child's hand and let it turn slowly

(NOTE: This is done to acquaint child with vibrating sensation of handpiece.)

E. Dip rubber cup attachment into the paste and place on facial surface of anterior teeth

JOB SHEET #2

F. Press rheostat on motor unit and maintain slow speed

G. Retract cheek with mouth mirror

H. Move rubber cup from one tooth to the next, putting more polish in cup as needed

(CAUTION: Avoid generating heat on a tooth by continuing to move rubber cup.)

I. Ask patient to take a small amount of water and swish around in mouth to dislodge debris and then empty in cuspidor

J. Wrap dental floss around index finger of each hand and carefully direct into mouth between contact areas of all teeth

K. Pull floss up on mesial and distal surfaces of teeth

(NOTE: Avoid damaging gingiva as floss is passed through contact area.)

III. Procedure for applying stannous fluoride

(NOTE: A commercial paste of acidulated sodium fluoride and zirconium silicate may be used, or your doctor may want you to use a mixture made up in your office.)

A. Place cotton rolls in appropriate arch of work

B. Use air syringe to dry teeth and remove debris

(NOTE: If applying commercial paste, use rubber cup attached to contra-angle and apply as if you were cleaning teeth.)

C. Place 8% stannous fluoride solution on cotton rolls in commercial trays

D. Instruct child in procedure and ask him or her to relax mouth

(NOTE: Avoid touching fluoride to child's cheeks or tongue as taste is unpleasant.)

E. Place tray in mandibular arch and leave for four to five minutes

F. Place saliva ejector in patient's mouth to remove saliva

G. Repeat application in maxillary arch

H. Ask child not to eat or drink anything for thirty minutes

I. Appoint patient to return in six months if caries are rampant

JOB SHEET #2

IV Procedure for applying sodium fluoride

(NOTE: Prepare solution by mixing 2.0 grams of sodium fluoride in 100 ml of distilled water. This may be stored for a short length of time.)

A. Use air syringe to dry teeth

B. Place cotton rolls in quadrant of work and dry teeth again

C. Place saliva ejector in floor of mouth to aid in saliva control

D. Use swab to apply fluoride on all surfaces of the teeth

E. Remove cotton rolls and repeat procedure in other quadrant with fresh cotton rolls

F. Remove cotton rolls

G. Ask patient to rinse mouth with mouthwash

H. Instruct patient that this treatment should be repeated every three to four years

Example: Ages 4, 7, 11, 15

I. Instruct patient to use fluoride toothpaste

J. Dismiss patient

K. Reward patient by giving him or her a toy or ring

PEDODONTICS
UNIT IV

JOB SHEET #3–APPLY PIT AND FISSURE SEALANT

I. Equipment

  A. Cotton pliers

  B. Cotton pledget and rolls

  C. Sealer kit

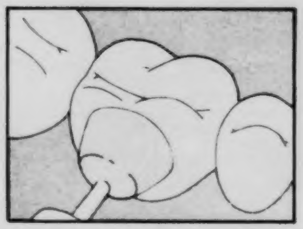
  (NOTE: This will contain the tube and applicator.)

  D. Explorer

II. Procedure

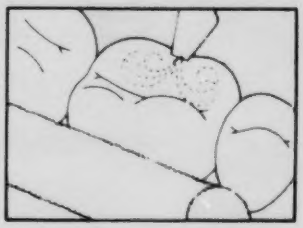
  A. Perform a prophylaxis with a non-fluoride, oil-free prophy paste; rinse with water (Figure 1)

FIGURE 1



  B. Isolate quadrant with cotton rolls (Figure 2)

FIGURE 2



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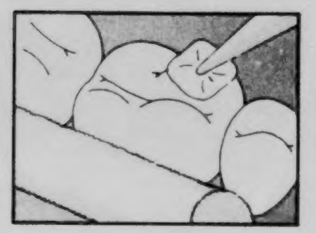
  C. Using air syringe, dry each tooth at least thirty seconds (Figure 2)

JOB SHEET #3

D. Apply etching solution with cotton pledget to each tooth surface (Figure 3)

(NOTE: Allow a full sixty seconds for each tooth.)

FIGURE 3



E. Remove cotton rolls and wipe off excess etching

F. Rinse teeth thoroughly

G. Dry well

(NOTE: If any areas do not appear frosty and opaque, retouch.)

H. Isolate other quadrant with fresh cotton rolls

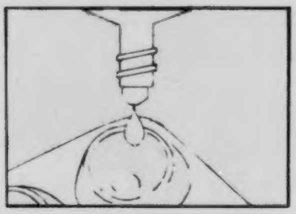
I. Dry teeth with air syringe for at least 30 seconds

J. Apply etching solution in the same manner as in other quadrant

(CAUTION: A dry field is essential.)

K. Dispense one drop of universal with one drop of catalyst into a mixing well (Figure 4)

FIGURE 4



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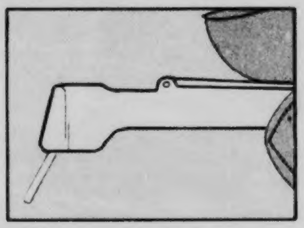
L. Mix with stick provided

(NOTE: This is sufficient quantity for only one quadrant.)

JOB SHEET #3

M. Insert a disposable tube in the applicator and depress lever (Figure 5)

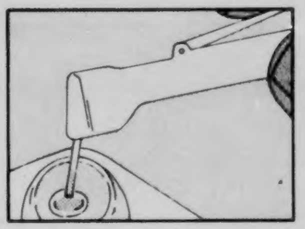
FIGURE 5



N. Immerse the tip of tube in sealant mix and release lever (Figure 6)

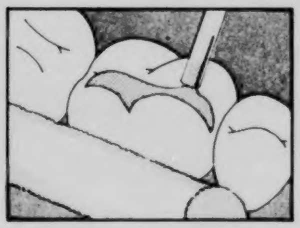
(NOTE: Applicator will draw up a measured amount of sealant suitable for an occlusal surface.)

FIGURE 6



O. Touch applicator tip to occlusal surface (Figure 7)

FIGURE 7



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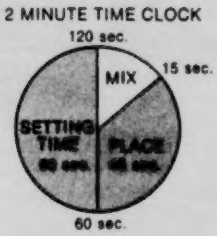
JOB SHEET #3

P. Depress lever gradually, moving tube slowly along fissures

(NOTE: Notice that the sealant flashes ahead of the tube into all crevices. This method eliminates air bubbles that might occur with other techniques.)

Q. Check total setting time of unused sealant in dish, about two minutes (Figure 8)

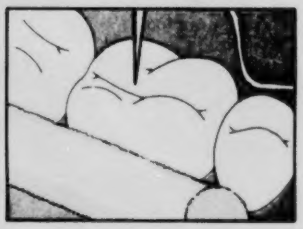
FIGURE 8



R. Wipe occlusal surface with cotton roll after sealant has set

S. Use an explorer to check complete coverage of pits and fissures (Figure 9)

FIGURE 9



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T. Repeat on other quadrant

U. Discard applicator tube and clean applicator with alcohol

V. Dismiss patient

PEDODONTICS
UNIT IV

JOB SHEET #4--ASSIST WITH PULPOTOMY

I. Equipment

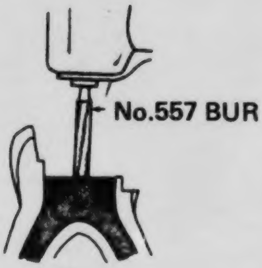
- A. Setup for local anesthetic
- B. Handpiece (slow)
- C. Round bur #6
- D. Fissure bur #557
- E. Spoon excavator (small)
- F. Sterile cotton pellets
- G. Basic tray setup
- H. Rubber dam setup
- I. Zinc oxide eugenol
- J. Calcium hydroxide or cotton soaked in formocresol
- K. Amalgam to be mixed

(NOTE: Be sure to put radiographs in view box and chart in proper place.)

II. Procedure

- A. Assist in placing rubber dam, leaving only affected tooth exposed
- B. Place bur #557 in handpiece (Figure 1)

FIGURE 1



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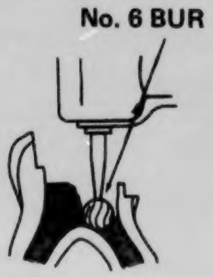
- C. Observe doctor drilling center of pulp

JOB SHEET #4

D. Hand doctor spoon excavator

E. Remove bur and put round #6 bur in handpiece (Figure 2)

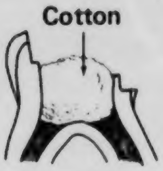
FIGURE 2



F. Observe doctor removing pulpal horn (Figure 2)

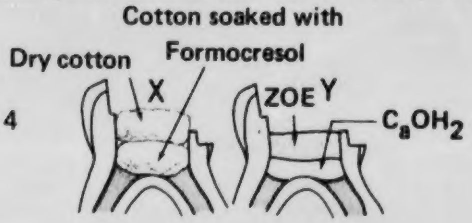
G. Hand doctor sterile cotton pellet wth cotton pliers to apply pressure over hemorrhage area (Figure 3)

FIGURE 3



H. Mix calcium hydroxide or cotton soaked with formocresol (Figure 4)

FIGURE 4


Cotton soaked with
Formocresol
Dry cotton
X
ZOE
Y
C_aOH_2

either X or Y

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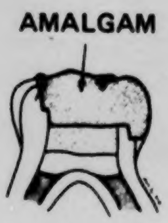
JOB SHEET #4

I. Mix z.o.e. to be applied next

J. Mix an amalgam for capping (Figure 5)

FIGURE 5



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PEDODONTICS
UNIT IV

JOB SHEET #5--APPLY STAINLESS STEEL CROWN ON STUDY MODEL

I. Equipment

- A. Stainless steel crowns (selection)
- B. Contouring pliers #112, #114
- C. Abrasive rubber wheel (mounted)
- D. Carborundum disc (mandrel)
- E. Cement (choice)

  Examples: Zinc phosphate, zinc oxide eugenol
- F. Slab and spatula
- G. Round bur #68
- H. Fissure burs #67, 700, 701

  (NOTE: Size of bur used will depend on work to be done.)
- I. Study model
- J. Tongue blade

II. Procedure

(NOTE: This procedure will be done with a study model.)

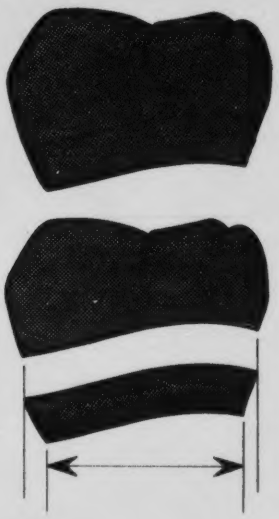
- A. Place round bur in contra-angle
- B. Anchor study model with left hand and use drill in right hand
- C. Drill out decay
- D. Mix cement to putty consistency
- E. Fill cavity
- F. Remove round bur from contra-angle and put in tapered fissure bur
- G. Reduce interproximal contacts to provide clearance for crown
- H. Remove tapered bur and put in round bur
- I. Reduce occlusal height to provide clearance for crown

JOB SHEET #5

J. Select stainless steel crown

K. Use crown scissors, pliers, disc and abrasive wheel to modify crown to fit tooth (Figure 1)

FIGURE 1



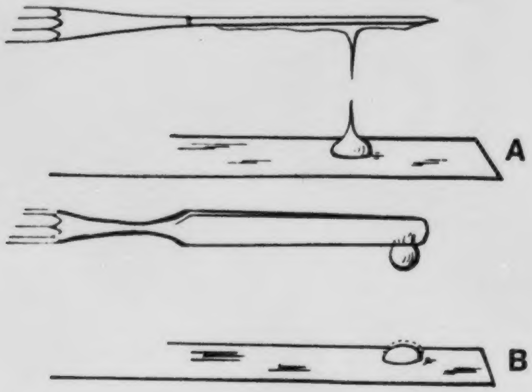
Used with permission of 3M Company.

L. Seat crown temporarily to determine extent of contact and extent of margin below the gingiva

M. Mix cement using manufacturer's instructions

Example: Consistency (Figure 2)

FIGURE 2



JOB SHEET #5

N. Use cement spatula to place cement in crown

O. Use air syringe to dry tooth (blow dust off tooth)

P. Use tongue blade to press down on crown

(NOTE: If this was performed in the mouth, you would ask patient to bite down to seat the crown.)

DA - 245-F

PEDODONTICS
UNIT IV

TEST

NAME________________________________ SCORE__________________________

1. Match terms associated with pedodontics to their correct definitions. Write the correct numbers in the blanks provided.

_____a. To branch or divide into two

_____b. Removal of vital portion of tooth pulp

_____c. Covers anatomical portion of tooth

_____d. Artificial tooth

_____e. Full or partial denture or bridgework

_____f. Area of dental practice limited to children

_____g. Caustic agent used in pulp capping

_____h. Provides form or retention of restorative material

_____i. Placing a protective dressing over the sensitive or exposed pulp

_____j. Pertaining to anatomy or structure

_____k. Qualities involved in appearance of a restoration

_____l. Cement or protective material placed over pulpal area of tooth to reduce thermal shock

_____m. Apparatus designed to encourage lingual position of an incisor to move facially

1. Pedodontics
2. Pontic
3. Pulp capping
4. Pulpotomy
5. Bite plane
6. Crown
7. Matrix
8. Bifurcation
9. Formocresol
10. Aesthetics
11. Artificial teeth
12. Base for filling
13. Anatomical

2. Select from the list below purposes of pedodontics. Write an "X" in the correct blanks.

_____a. Perform pulpal therapy for deciduous and permanent teeth

_____b. Manage unpredictable behaviour during visits

_____c. Administer preventive procedures ______d. Serve patient during entire lifetime

______e. Useful especially for gifted children

______f. Serves as a family practice

______g. Provide a program of complete oral health care during developmental periods

______h. Perform restorative techniques, especially for children

______i. Diagnose and treat congenital and developmental anomalies

3. Select from the list below anatomical differences of deciduous teeth from permanent teeth. Write an "X" in the blanks beside descriptons of deciduous teeth.

______a. Narrow flare on roots

______b. Lighter in color

______c. Smaller in all dimensions

______d. Have higher pulp horns in molars

______e. More variations in depth of crowns

______f. Thicker enamel cap

______g. Proportionally larger pulp chamber

4. Select from the list below diagnostic aids used in pedodontics. Write an "X" in the correct blanks.

______a. Oral examination

______b. Handpiece

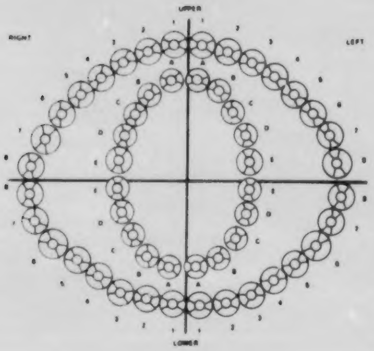
______c. Radiographs

______d. Study models

______e. Surgical procedures

______f. Saliva test

5. Distinguish between charting methods used in pedodontics. Write a "U" under the picture of the Universal method, and a "P" under the picture of the Palmer method.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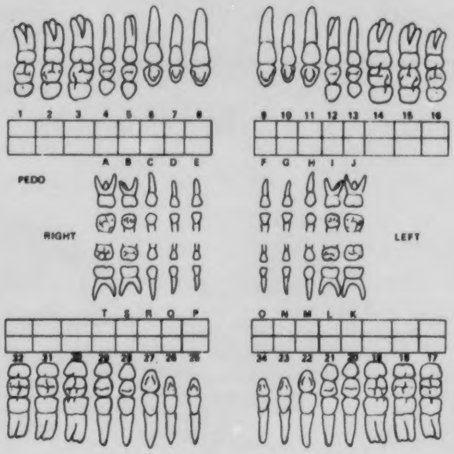
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a. ______________________ b. ______________________

6. Describe pulp capping for deciduous teeth.

a. Purposes--______________________

____

b. Reasons--______________________

____

c. Procedure--______________________

____

d. Risk--______________________

____

7. State methods of controlling fears in children.

a. ______________________

b. ______________________

c. ______________________

d. ______________________

8. Describe characteristics of different age groups.

   a. 2-to-3 year old--______________________________

   ____

   ____

   b. 3-to-6 year old--______________________________

   ____

   ____

   c. 6-to-9 year old--______________________________

   ____

   ____

   d. 9-to-12 year old--_____________________________

   ____

   ____

9. Select from the list below types of dental emergencies. Mark each correct answer with an "X."

   _____a. Biting cheek following anesthesia

   _____b. Dislocated tooth

   _____c. Herpes simplex

   _____d. Injury to oral mucosa or gingiva

   _____e. Teeth pushed up into alveolus

   _____f. Hypoplasia

   _____g. Fractured incisors or centrals

10. Select from the list below purposes of stainless steel crowns. Mark each correct answer with an "X."

   _____a. Restore teeth for handicapped children

   _____b. Used following pulpal therapy

   _____c. Used for aesthetic purposes

   _____d. Used for rampant caries on three or more surfaces

11. State reasons for using a stainless steel crown.

____

____

12. Distinguish between types of space maintainers and their uses. Write an "F" to indicate fixed maintainers, and an "R" to indicate removable maintainers.

    ______a. Prevent normal shifting of teeth

    ______b. Used to guide first permanent molars into position

13. Chart deciduous teeth using Universal and Palmer systems.

14. Use correct pedodontic management words.

15. Demonstrate the ability to:

    a. Prepare child for dental exam.

    b. Apply topical fluorides.

    c. Apply pit and fissure sealant.

    d. Assist with pulpotomy.

    e. Apply stainless steel crown on study model.

    (NOTE: If activities 13-15 have not been finished before the test, ask your instructor when they should be completed.)

PEDODONTICS
UNIT IV

ANSWERS TO TEST

1. a. 8
   b. 4
   c. 6
   d. 2
   e. 11
   f. 1
   g. 9
   h. 7
   i. 3
   j. 13
   k. 10
   l. 12
   m. 5

2. a, b, c, g, h, i

3. b, c, d, g

4. a, c, d, f

5. a. P
   b. U

6. Description should include these points:
   a. Purposes--Protects exposed healthy pulp and encourages pulp to recover
   b. Reasons--Excavation of deep carious lesions and accidental mechanical exposure
   c. Procedure--Seal exposure with layer of calcium hydroxide product and layer coat of z.o.e. to hold calcium hydroxide in place
   d. Risk--Recovery of pulp is not always successful

7. a. Inform child of purpose of dentistry
   b. Introduce use of equipment
   c. Explain procedures
   d. Stress truth

8. Description should include at least part of the following:
    - a. 2-to-3 year old
        1. Accepts mother's absence for short periods of time
        2. Good time to introduce dental care
        3. Follows instructions for short periods of time
    - b. 3-to-6 year old
        1. Becomes fairly independent
        2. Is constantly active and alert
        3. Has longer attention span
    - c. 6-to-9 year old
        1. Is curious and eager to learn
        2. Strives to please others
        3. Is sensitive to criticism
    - d. 9-to-12 year old
        1. Is nervous and fidgety
        2. Is congenial and well-behaved
        3. Cannot be expected to always behave as desired

9. b, d, e, g

10. a, b, d

11. Lack of sufficient tooth structure to use amalgam; provides a suitable substitute for cast gold

12. a. R

    b. F

13. Evaluated to satisfaction of instructor

14. Evaluated to satisfaction of instructor

15. Performance skills evaluated to satisfaction of instructor

PERIODONTICS
UNIT V

UNIT OBJECTIVE

After completion of this unit, the student should be able to assist the dentist during periodontic examination and treatment. This knowledge will be evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with periodontics to the correct definitions.
2. Select from a list results of accumulation of plaque and calculus.
3. State characteristics of periodontal disease.
4. Describe the purposes of periodontal therapy.
5. Select from a list observations made by dentist during periodontal examination.
6. Describe duties of dental assistant during periodontic examination and treatment.
7. Identify instruments used in periodontics.
8. Match perio instruments to their correct uses.
9. Record patient's health history.
10. Chart perio findings during examination.
11. Demonstrate the ability to:
    a. Assist with scaling and subgingival curettage.
    b. Assist with occlusal adjustment.
    c. Assist with gingivectomy.
    d. Assist with placement of periodontal dressing (postgingivectomy).
    e. Assist with removal of periodontal surgical dressing.
    f. Assist with treatment of acute pericoronitis.

PERIODONTICS
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information, assignment, and job sheets.

   C. Make transparencies.

   D. Order film.

   E. Discuss unit and specific objectives.

   F. Provide student with equipment and materials for assignment and job sheets.

   G. Demonstrate and discuss assignment and job sheets.

   H. Invite a periodontist to speak with class on common procedures performed in the dental office.

   Examples: Gingivectomy, treatment for pericoronitis

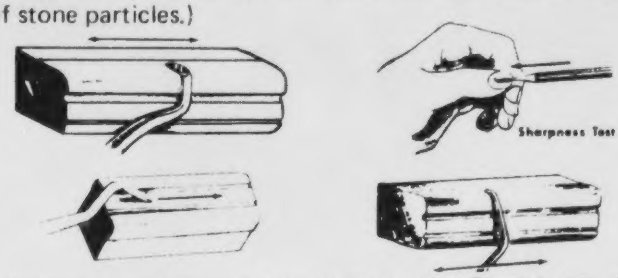
   I. Invite former student or a dental assistant to role play a dentist in order to assist the student in learning operative procedures.

   J. Lead a discussion on instruments of choice while working in different quadrants.

   Examples: Upper left, upper right

   K. Teach students methods of sharpening perio instruments. Use Arkansas stone or stone of choice.

   (NOTE: Wet stone or use oil on stone for a smoother finish and elimination of stone particles.)



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L. Show student radiographs of degenerative conditions of gingiva and bone.

M. Lead a discussion on drugs used in periodontics.

Examples: APC or codeine for pain, antibiotics for infection

N. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters

1. TM 1--Progress of Periodontal Destruction
2. TM 2--Working Ends of Chisels and Hatchets
3. TM 3--Working Ends of Margin Trimmers and Hoe Excavators

D. Assignment sheets

1. Assignment Sheet #1--Record Patient's Health History
2. Assignment Sheet #2--Chart Perio Findings During Examination

E. Job sheets

1. Job Sheet #1--Assist with Scaling and Subgingival Curettage
2. Job Sheet #2--Assist with Occlusal Adjustment
3. Job Sheet #3--Assist with Gingivectomy
4. Job Sheet #4--Assist with Placement of Periodontal Dressing (Post-gingivectomy)
5. Job Sheet #5--Assist with Removal of Periodontal Surgical Dressing
6. Job Sheet #6--Assist with Treatment of Acute Pericoronitis

F. Test

G. Answers to test

III. Unit references:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W. B. Saunders Co., 1976.

B. Strickland, William D., and Baker, Benjamin R. *Dental Assisting, Course VII: Clinical Application.* 3rd ed. Chapel Hill: University of North Carolina, 1980.

C. Strickland, William D. and Baker, Benjamin R. *Dental Assisting, Course V: Clinical Sciences.* 3rd ed. Chapel Hill: University of North Carolina, 1980.

D. Goldman, Henry M., and Cohen, D. Walter. *An Introduction to Periodontia.* 4th ed. St. Louis: C.V. Mosby Co., 1969.

IV. Additional materials:

A. Slides

1. "Periodontal Disease." Cassette, 7 minutes, 1971. University of Maryland School of Dentistry, 666 West Baltimore Street, Baltimore, MD 21201.

2. "Periodontal Probe Techniques." Cassette, 15 minutes. Springfield Technical College, Dental Hygiene Department, 1 Armory Square, Springfield, MA 10553.

   (NOTE: This slide/cassette presentation is an introduction to the proper techniques and utilization of the periodontal probe with emphasis on insertion, angulation, and adaption.)

B. Film--"Dental Records--Periodontal Examination, Part II." 18 minutes, 1970. National Medical Audiovisual Center Annex, Atlanta, GA 30324.

PERIODONTICS
UNIT V

INFORMATION SHEET

I. Terms and definitions

A. Periodontics--Branch of dentistry which deals with prevention and treatment of diseases of the bone and soft tissues surrounding teeth

B. Deposition--Process of depositing newly manufactured cells

C. Epulis--Fibrous growth extending from the epithelium of the gingiva

D. Furcation--Forklike division in roots of teeth

(NOTE: Teeth may be bifurcated [two-rooted] and trifurcated [three-rooted].)

E. Lamina dura--Thin layer of bone located on root side of alveolus, containing the tooth

F. Root planing--Mechanical scraping of surface of tooth roots for removal of bacteria and necrotic tissue

G. Subgingival (infra-gingival)--Below the free gingival crest

H. Sulcus--A space; trench bound by epithelial tissue and marginal gingiva

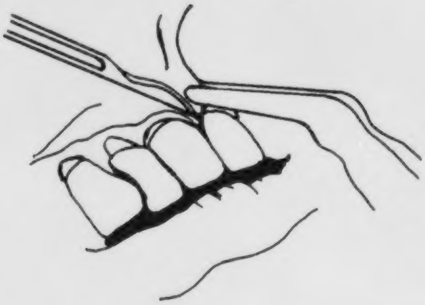
I. Supragingival--Above the gingival crest

J. Periodontosis--Destruction of supportive tissue of tooth; non-inflammatory

K. Periodontitis--Inflammation of the periodontal membrane and ligaments

L. Pericoronitis--Inflammation of soft tissue over crown of an erupting tooth

M. Frenectomy--Surgical removal of entire frenum



INFORMATION SHEET

N. Frenotomy--Severing and relocation of frenum

O. Granulation tissue--Connective tissue cells and young blood vessels formed during repair of a wound

Example: Dry socket

II. Results of accumulation of plaque and calculus

A. Reduces tissue tolerance

B. Leads to tissue breakdown

C. Creates possibility of toxigenic bacteria

D. Causes inflammatory responses

E. Causes pocket formations from reactions of plaque and calculus

(NOTE: Periodontal disease is a complicated systemic disease with many possible causes, such as lack of proper oral care, chemical imbalance, or previous disease.)

III. Characteristics of periodontal disease (Transparency 1)

A. Progressive

B. Cannot be self-cured

C. Results in loss of supportive bone and teeth

IV. Purposes of periodontal therapy

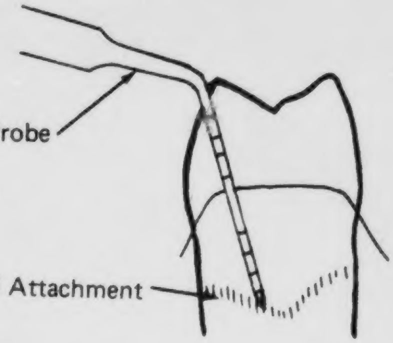
A. To remove factors which are responsible for the disease

B. To restore tissues to a sound physiological condition

V. Observations made by dentist during periodontal examination

A. Condition of oral cavity

B. Depth of pockets in gum (gingiva)



INFORMATION SHEET

C. Sensitivity and mobility of teeth

D. Bruxism (grinding of the teeth)

E. Radiographs

(NOTE: A complete health record of patient is recorded, including past oral and systemic diseases; an oral exfoliative cytology is performed if indicated.)

VI. Duties of dental assistant during periodontic examination and treatment

A. Examination

1. Record condition of patient's general and oral health

2. Record condition of oral cavity

3. Chart readings of pocket depth of gingival sulcus

(NOTE: The dentist will establish a routine for reading measurements of periodontal pockets of each tooth.)

Examples: Mesiofacial, facial, distofacial, mesiolingual, lingual, distolingual

B. Treatment

1. Record types of pre- and post-medication

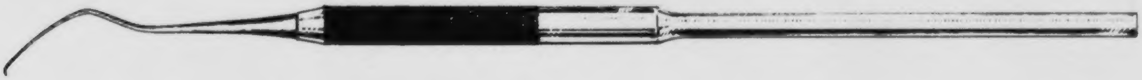
2. Record prescription

Examples: Vitamins, antibiotics

3. Assist with all surgical procedures

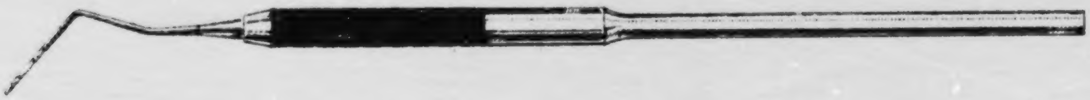
VII. Instruments used in periodontics (Transparencies 2 and 3)

A. Explorer #17

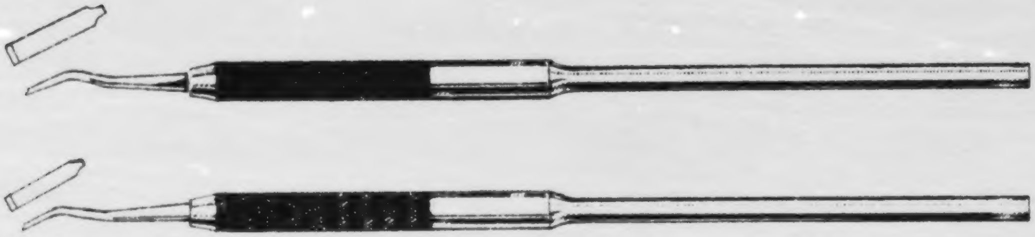


INFORMATION SHEET

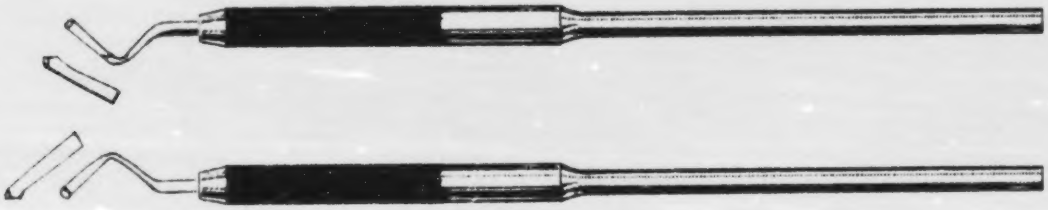
B. Periodontal pocket probe (probe)



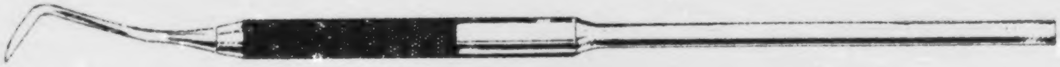
C. Angle chisels



D. Hoe scalers

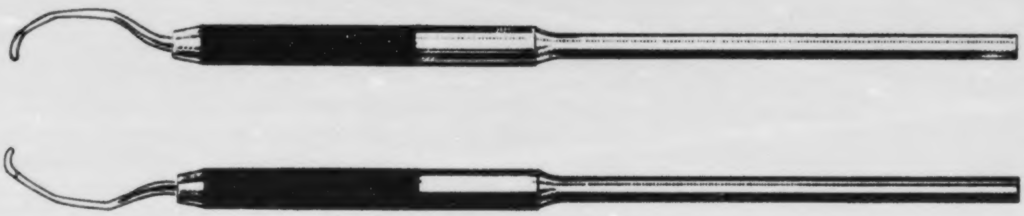


E. Scaler

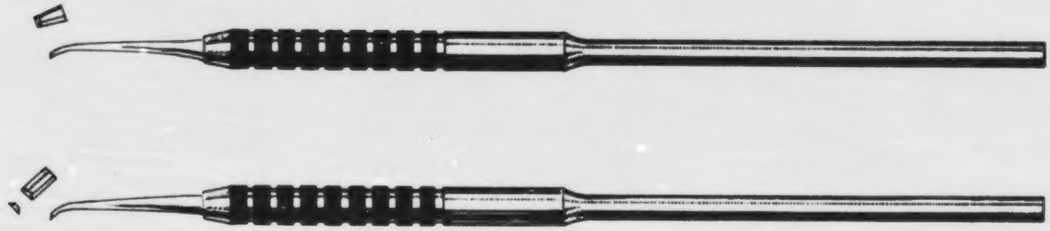


INFORMATION SHEET

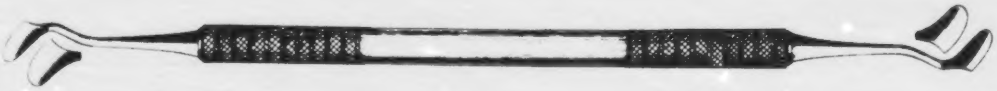
F. Curettes



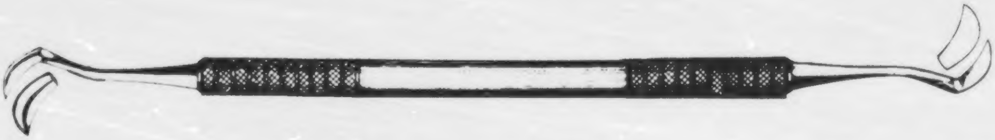
G. Hoes



H. Periodontal knife

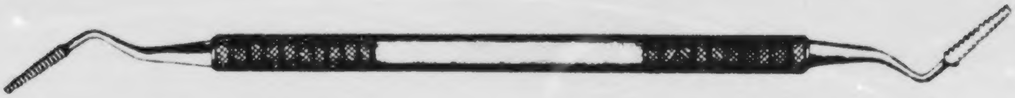


I. Interproximal knife

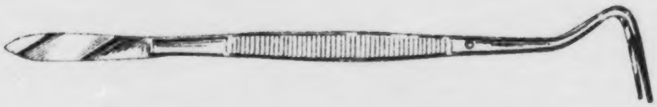


INFORMATION SHEET

J. Interproximal file



K. Pocket marker



VIII. Perio instruments and their uses (Transparencies 2 and 3)

A. Explorer--Used to detect calculus and caries

B. Probe--Used to measure or record depth of a gingival pocket

(NOTE: This instrument is marked in one or two mm increments, with a gradation from one to ten mm, and is inserted at the gingival sulcus.)

C. Angle chisel--Used in proximal surfaces of teeth

D. Hoe scaler--Used in posterior teeth for difficult calculus

E. Scaler--Used for removal of subgingival calculus

F. Curette--Used to adapt subgingival calculus to convexity of a tooth

G. Hoe--Used in supra- and subgingival calculus in posterior teeth

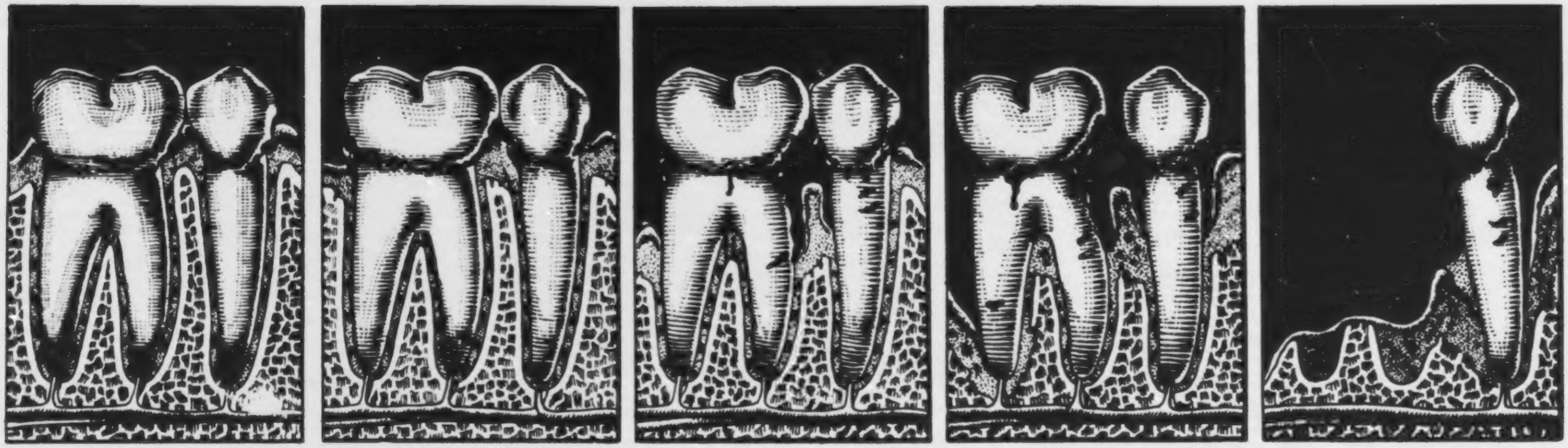
H. Perio knife--Used for removal of degenerative tissue

I. Interproximal knife--Used for removal of tissue between teeth

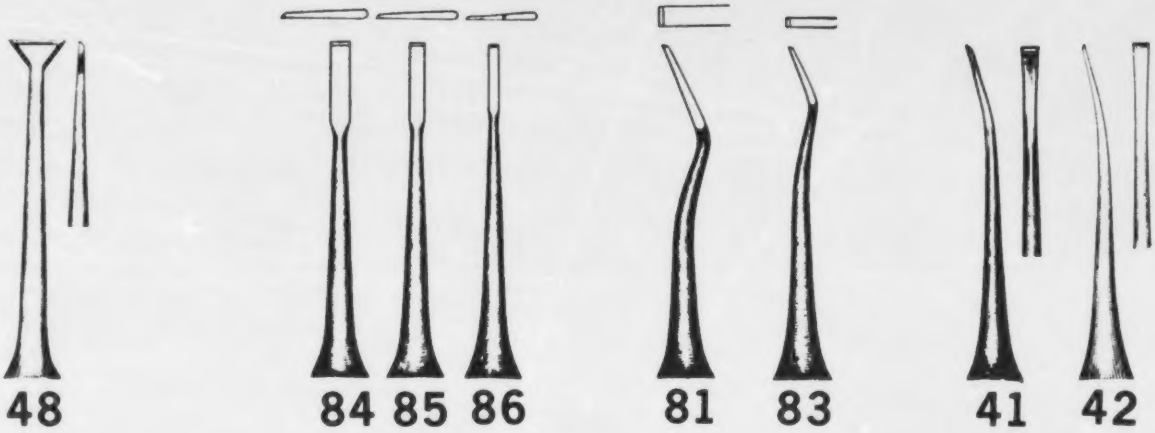
J. Interproximal file--Used for heavy deposits of calculus

K. Pocket marker--Used to press small holes in gingiva to mark depth of inflammation or pockets

Progress of Periodontal Destruction



Working Ends of Chisels and Hatches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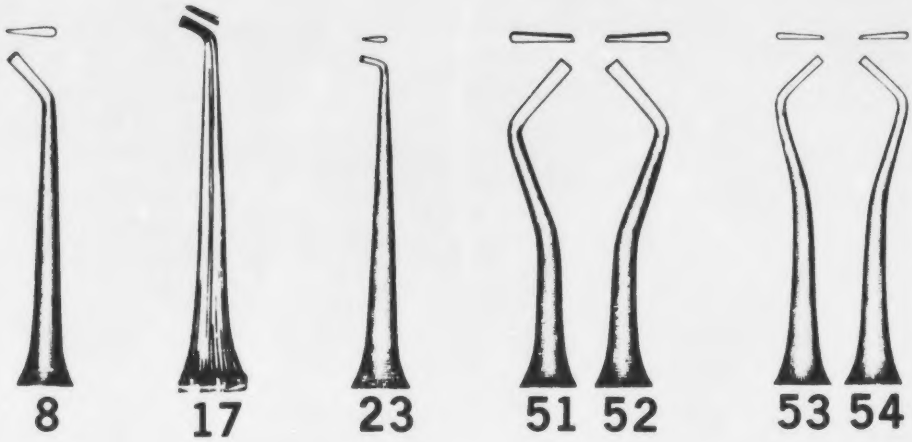
Chisels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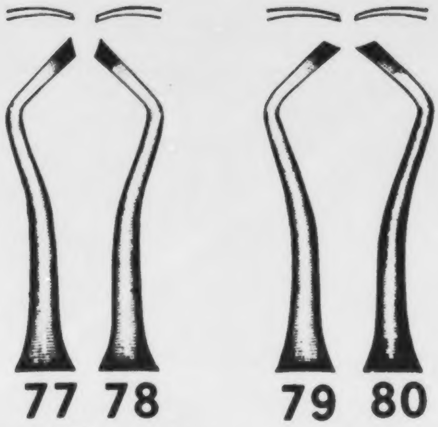
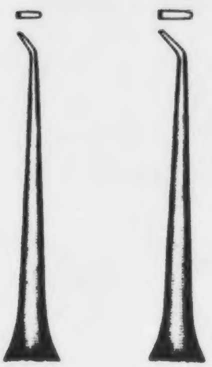
Hatchets

Working Ends of Margin Trimmers and Hoe Excavators



Gingival Margin Trimmers



Hoe Excavators

DA - 271-F

PERIODONTICS
UNIT V

ASSIGNMENT SHEET #1--RECORD PATIENT'S HEALTH HISTORY

NAME ______________________________ SCORE ______________

The dental assistant has the primary responsibility for securing many of the patient's records, including information and health questions. Complete the following health record using another student to role play as your patient.

HEALTH HISTORY

What is the general condition of teeth? ____________

What is the general condition of soft tissue? ____________ Color? ____________

Inflammation present? ______ Moderate? ______ Severe? ______ Condition of saliva? ______

Is there any recession? ______ Is there any pain in the region of the ear? ______

Do you have difficulty hearing? ____________

How is the occlusion? ______ Abnormalities? ______

How long since you have been to a dentist? ______ What was done then? ______

Did you have x rays? ______ Did you make regular visits to the dentist before then? ______

Have you lost many teeth? ______ Why? ______

Were there any complications with the extractions? ____________

Have they ever been replaced by A fixed bridge? ______ A removable partial? ______ A denture? ______

How often do you brush your teeth? ______ When? ______

Do your gums bleed? ______ When? ______

Does food collect between your teeth? ______ Is your breath offensive? ______

Do you eat sweets? ______ Raw vegetables? ______ Do you eat between meals? ______

Are your teeth sensitive to heat? ______ To cold? ______ To sweets? ______

How do you feel about your teeth? ____________

How do you feel about dentures? ____________

When was your last complete physical examination? ______ Birth date ______ Weight ______

Are you under the care of a physician now? ______ For what reason? ______

Are you receiving any medication? ______ What? ______

Do you have excessive bleeding from a cut? ____________

Have you ever had radiation treatment? ______ Anemia? ______ Diabetes? ______

Do you have any allergies? ______ To penicillin? ______ To novocain? ______ To food? ______

Arthritis? ______ Rheumatic fever? ______ Blood pressure S ___ /D ___ / ___ Heart condition? ______

Have you ever had hepatitis? ______ T.B.? ______ Comments ____________

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PERIODONTICS
UNIT V

ASSIGNMENT SHEET #2--CHART PERIO FINDINGS DURING EXAMINATION

NAME ______________________________ SCORE ______________

The dental assistant is responsible for charting perio findings during the examination. An example of a partial chart used during a perio examination is shown below. (Figure 1)

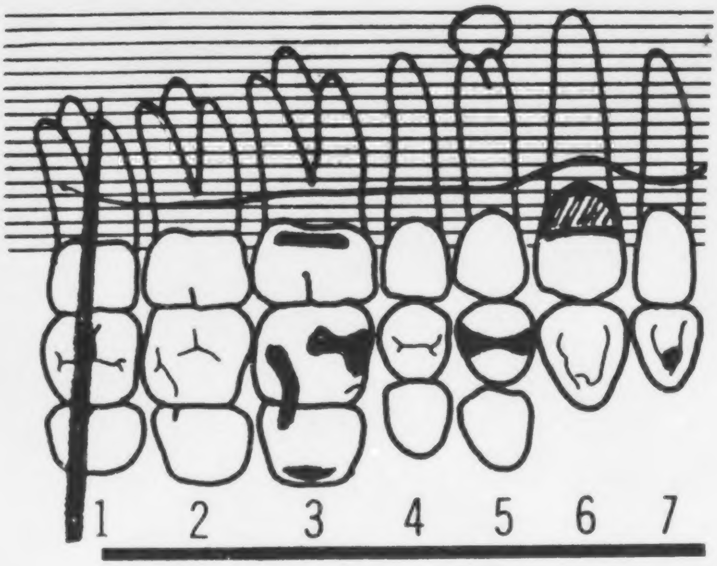

FIGURE 1

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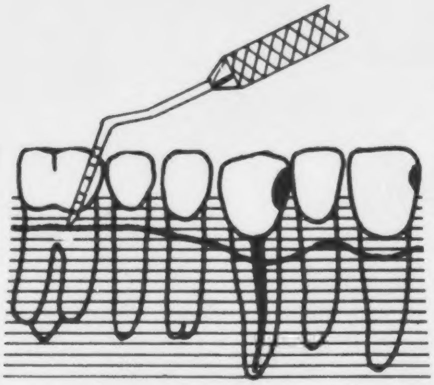
Note that the chart includes regular tooth surface chartings. The lines indicate millimeters (mm), with each line representing one millimeter. These lines are used to record the depths of the gingival "pockets" at the widened gingival sulcus.

ASSIGNMENT SHEET #2

Each dentist will establish a routine for recording perio examinations. As the dentist moves the perio probe (Figure 2) around each tooth in short walking steps, the assistant charts the line indicating the depths of the "pockets" on the buccal and facial surfaces.

Example: FACIAL SURFACE--Number two, distofacial, 2 mm; facial, 3 mm; mesiofacial, 3 mm (Figure 2)

FIGURE 2



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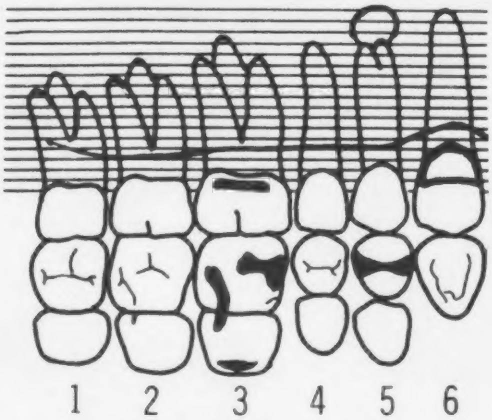
To chart perio findings for the lingual surface of each tooth, use small numbers next to the tooth to indicate pocket depth in distal, lingual, and mesial surfaces. (Figure 3)

Example: LINGUAL SURFACE--Number two, distolingual, 2 mm; lingual, 3 mm; mesiolingual, 3 mm (Figure 3)

FIGURE 3



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ASSIGNMENT SHEET #2

Use the chart on the next page and information provided below to chart the perio condition of the patient as directed by the dentist.

Record: #1 Removal indicated

#2 mesiofacial 2 mm; facial 2 mm; distofacial 3 mm; mesiofacial 2 mm; lingual 3 mm; distolingual 2 mm

#3 mesiofacial 2 mm; facial 2 mm; distofacial 2 mm; mesiolingual 2 mm; facial 2 mm; distofacial 3 mm

#4 mesiofacial 3 mm; facial 3 mm; distofacial 4 mm; mesiolingual 3 mm; lingual 3 mm; distolingual 4 mm

#5 distofacial 2 mm; facial 3 mm; distofacial 4 mm

#6 distolingual 3 mm; facial 3 mm; distofacial 4 mm; distolingual 3 mm; lingual 3 mm; distolingual 4 mm

#7 through #12 all surfaces 5 mm

#13 mesiofacial 4 mm; facial 4 mm; distofacial 3 mm; mesiolingual 4 mm; distolingual 3 mm

#14 and #15 mesiofacial 3 mm; facial 3 mm; distofacial 2 mm; mesiolingual 3 mm; facial 3 mm; distofacial 2 mm

#16 Extracted

#17 Impacted-no packed indications

#18 distofacial 2 mm; facial 2 mm; mesiofacial 2 mm; distolingual 2 mm; lingual 3 mm; mesiofacial 3 mm

#19 distofacial 3 mm; facial 3 mm; mesiofacial 3 mm; distolingual 3 mm; lingual 4 mm; mesiolingual 4 mm

#20 distofacial 2 mm; facial 3 mm; mesiolingual 3 mm

#21 distofacial 3 mm; facial 3 mm; mesiofacial 4 mm; distolingual 3 mm; lingual 4 mm; mesiolingual 4 mm

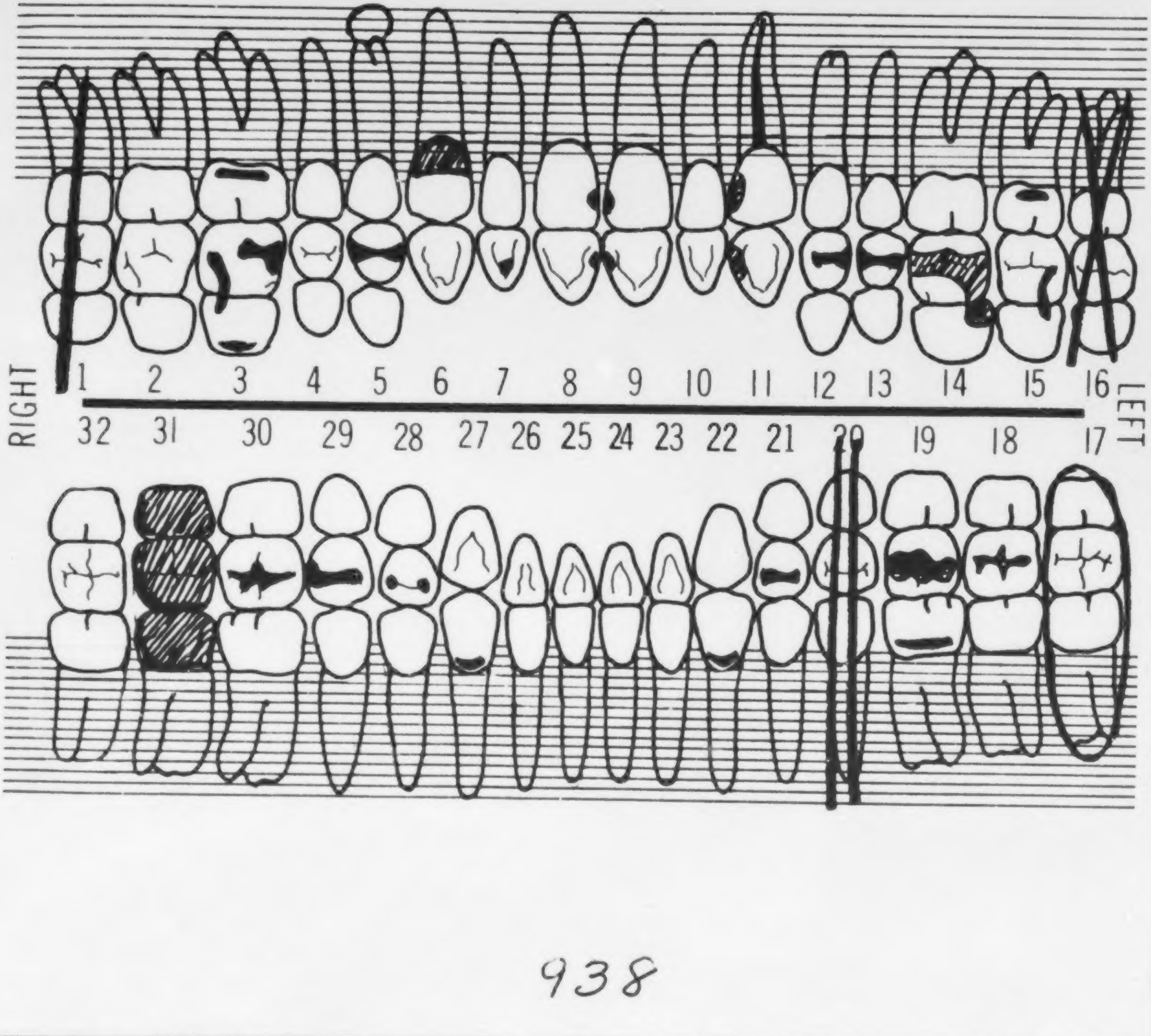
#22 distofacial 4 mm; facial 4 mm; mesiofacial 5 mm

#23 through #28 all surfaces 5 mm

#29 distofacial 4 mm; facial 4 mm; mesiofacial 4 mm; distolingual 4 mm; lingual 3 mm; mesiolingual 3 mm

#30, #31, #32 all surfaces 2 mm

ASSIGNMENT SHEET #2


RIGHT
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PERIODONTICS
UNIT V

JOB SHEET #1--ASSIST WITH SCALING AND SUBGINGIVAL CURETTAGE

(NOTE: When assisting with any chairside procedure, always have patient's chart and X-rays in proper place.)

I. Equipment

  A. Mirror

  B. Explorer

  C. Saliva ejector

  D. Anesthesia (topical) or block if indicated

  E. Cotton-tipped applicator

  F. Cotton gauze 2 x 2

  G. Air syringe tip

  H. Dappen dish with prophy paste

  I. Evacuator tip

  J. Rubber cup

  K. Periodontal probe

  L. Prophylaxis angle

  M. Scalers

    1. Anterior 1-8

    2. Posterior 9-14

  N. Curette

II. Procedure for scaling

  A. Seat patient

  B. Drape patient

  C. Scrub hands (surgically)

  D. Pass mirror and explorer

  E. Adjust light for quadrant of work

JOB SHEET #1

F. Use evacuator and air to dry teeth

(NOTE: This provides doctor with a clear view of debris and calculus.)

G. Hand doctor scaler (choice) for upper right posterior

(NOTE: Some doctors may want to apply a topical anesthetic to the gingiva before scaling.)

H. Pass a cotton-tipped applicator dipped in anesthesia to doctor

I. Adjust light as doctor scales various surfaces of the teeth

(NOTE: Lay air syringe in your lap while reaching for other items.)

J. Use cotton gauze to remove debris from the instrument as needed

K. Retract cheek and remove saliva accumulation and loose calculus (Figures 1 and 2)

FIGURE 1

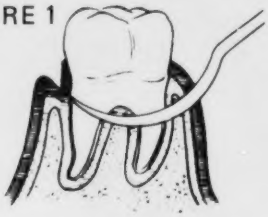
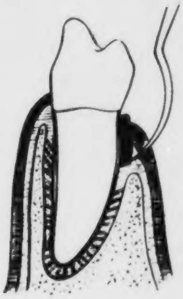


FIGURE 2



(NOTE: After doctor moves to another quadrant, rinse mouth and evacuate.)

L. Receive the posterior scaler in the left hand and exchange it for the anterior scaler

(NOTE: Cross over and return posterior scaler to tray after wiping blood and debris from scaler. Keep instruments in order, as the above procedure will be repeated until all surfaces are covered.)

M. Place evacuator directly below the tooth being scaled

(NOTE: This prevents debris from being dropped down into the throat.)

N. Direct a stream of air on the mirror to provide visibility for doctor

III. Procedure for subgingival curettage

A. Saturate a number of cotton-tipped applicators with topical anesthesia

B. Hand doctor explorer and receive scaler; place on tray

JOB SHEET #1

C. Hold the topical anesthetic in the left hand

D. Use the air syringe with the right hand to dry the teeth in the quadrant being examined

E. Direct air into the gingival crevice

F. Receive the explorer and reach hand forward for doctor to take the topical anesthetic

G. Receive the cotton-tipped applicators

H. Pass curette of choice to doctor

(NOTE: The curettage procedure will draw hemorrhage from the gingiva.)

I. Place evacuator tip as close to working area as possible

(NOTE: The doctor will pause frequently for you to clean.)

J. Rinse, evacuate, and air dry working area

(CAUTION: Use care in directing air as scaled teeth are quite sensitive.)

K. Hold a gauze square to remove debris from instrument as needed

(NOTE: Exchange instruments as the doctor moves to a different quadrant and adjust light accordingly.)

L. Exchange clean mirror and explorer for other mouth mirror and curette

(NOTE: Wipe instruments clean with gauze and place in proper order.)

M. Place a rubber cap on prophy angle

N. Attach angle to the straight handpiece

O. Hold angle in left hand; receive mirror and explorer with fingers of left hand while extending handpiece to doctor

P. Hold prophylaxis paste under patient's chin with left hand

Q. Hold evacuator tip at the point of tooth being polished

R. Use water syringe to rinse area

S. Have patient empty mouth (use evacuator)

T. Pass doctor mirror and explorer

JOB SHEET #1

U. Dry area which doctor inspects

(NOTE: Remove sufficient dental floss from dispenser and place into prophy cup to saturate with paste [pumice].)

V. Receive handpiece in exchange for floss

W. Rinse patient's mouth again

X. Clean patient's lips and face with dry cotton gauze

IV. Procedure for applying fluoride solution after periodontal pack has been removed

(NOTE: Sodium fluoride and kaolin with glycerin are mixed as solution to be applied to sensitive teeth.)

A. Dry surfaces of the teeth and cementum

B. Paint on fluoride solution

C. Rinse clean after two to three minutes

D. Repeat application if necessary

(NOTE: Some doctors may use a commercially prepared agent for desensitizing.)

E. Dismiss patient

PERIODONTICS
UNIT V

JOB SHEET #2--ASSIST WITH OCCLUSAL ADJUSTMENT

I. Equipment

- A. Abrasive stones
- B. Articulating sheet wax
- C. Articulating paper and pliers
- D. Cotton gauze 2 x 2
- E. Dappen dish
- F. Marking pencil
- G. Mirror
- H. Periodontal probe
- I. Handpiece
- J. Burlew wheels

II. Procedure

- A. Seat patient
- B. Adjust light
- C. Hand patient's study casts to doctor
- D. Place an abrasive stone in slow speed handpiece
- E. Pass to doctor with left hand
- F. Secure a piece of articulating paper in pliers
- G. Place articulating paper over patient's teeth
- H. Ask patient to move teeth in a chewing motion on the side the paper is placed
- I. Return paper and pliers to tray
- J. Receive study casts from doctor with right hand
- K. Pass the handpiece and mirror with the left hand
- L. Direct a steady flow of air as the doctor grinds the occlusal surfaces

  (NOTE: Direct air on mirror frequently to keep doctor's view clear.)

JOB SHEET #2

M. Place a rubber wheel in handpiece

N. Rinse mouth thoroughly using water syringe

O. Apply air on tooth being polished to avoid overheating

P. Rinse again

Q. Dismiss patient

PERIODONTICS
UNIT V

JOB SHEET #3--ASSIST WITH GINGIVECTOMY

I. Equipment

- A. Disposable anesthetic syringe and needle
- B. Scalpel and blades
- C. Cotton pliers
- D. Cotton gauze 2 x 2
- E. Curettes
- F. Explorer
- G. Gingivectomy knives
  1. Broad-blade
  2. Interdental
- H. Mouth mirror
- I. Periosteal elevator
- J. Scissors
- K. Hemostats
- L. Evacuator tip, surgical

II. Procedure

- A. Use surgical scrub
- B. Drape patient
- C. Adjust light
- D. Prepare topical anesthesia and syringe for block injection

  (NOTE: After the anesthetic has been given, proceed as follows.)
- E. Pass periodontal pocket marker
- F. Retract patient's cheek

JOB SHEET #3

G. Use patient's chart to read the sulcus depth of each tooth as doctor marks the incision line (Figures 1 and 2)

(NOTE: The doctor will mark the necessary bleeding points on the gingiva to outline the line of incision.)

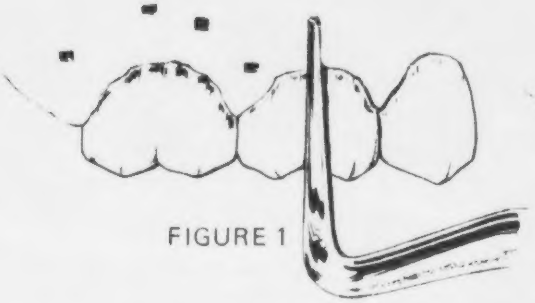


FIGURE 1

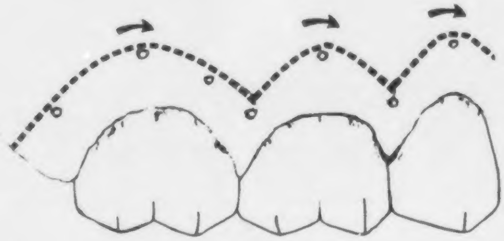


FIGURE 2

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H. Pass broad-blade knife (scalpel)

(NOTE: The blades of choice will be used.)

Examples: Facial or lingual #20G or #21G; interproximal #22G and #23G

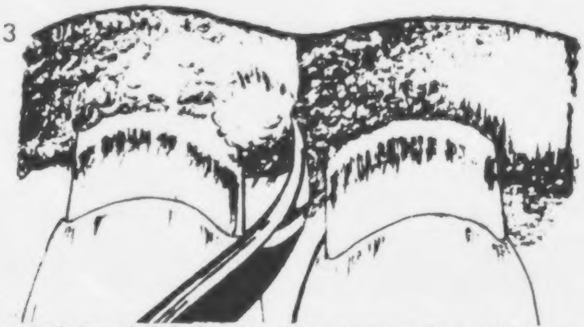
(CAUTION: Make sure hands do not touch the blade.)

I. Use oral evacuator diligently at surgical site; at intervals clean the floor of the mouth and throat

J. Receive gingivectomy knife after doctor makes initial incision (Figure 3)

(NOTE: Use a 2 x 2 gauze to wipe blood from knife blade.)

FIGURE 3



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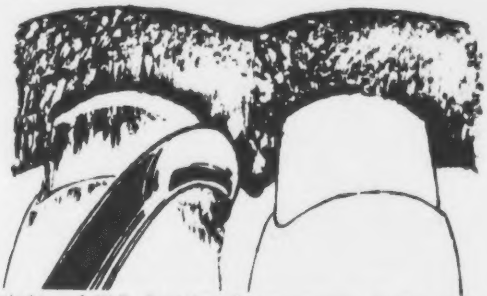
JOB SHEET #3

K. Hand doctor curette (choice)

L. Continue with oral evacuator as doctor removes calculus and granulation tissue (Figure 4)

FIGURE 4



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(NOTE: The root surface is scaled and planed in readiness for the surgical pack.)

PERIODONTICS
UNIT V

JOB SHEET #4--ASSIST WITH PLACEMENT OF PERIODONTAL DRESSING (POSTGINGIVECTOMY)

I. Equipment

  A. Spatula, choice

  B. Paper pad

  C. Powder and liquid

  (NOTE: Use doctor's choice of paste or powder and liquid.)

  D. Plastic interproximal instrument

  E. Scissors

  F. Disposable gloves

  G. Dental tape

II. Procedure for mixing

  A. Measure powder and liquid

  (NOTE: Use manufacturer's instructions for amount of powder and liquid.)

  B. Mix on a paper pad to achieve a putty-like consistency

  C. Put on plastic gloves

  D. Form the mix into an elongated roll approximately 5 to 6 mm in width

  E. Roll length to the extent of surgery

III. Procedure for placement

  A. Prepare patient

  Examples: Seat patient, place napkin, adjust chair and light

  B. Instruct patient as to procedure

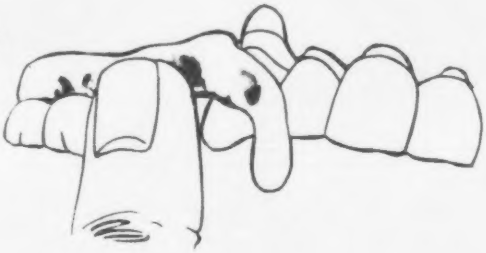
  (NOTE: The dental assistant with expanded function will place the dressing.)

JOB SHEET #4

C. Place dressing on the facial surface of teeth of the operated quadrant with the pack placed around the last tooth in the arch

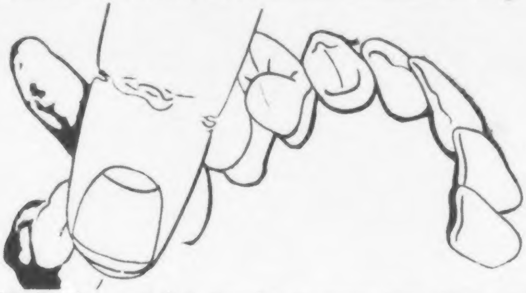
D. Press gently into place along the gingival area (Figure 1)

FIGURE 1



E. Press into interproximal surfaces, press second strip in posterior lingual area of the teeth in quadrant, bringing strip to the incisal area (Figure 2)

FIGURE 2



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F. Join strips interproximally by pressing them from the lingual to the facial areas with thumb and forefinger

G. Use interproximal instrument to gently force dressing into interproximal area

(NOTE: Dental tape may be tied to tooth crowns adjacent to the space before placing the dressing if you have a partial edentulous quadrant. Surgical area should be completely covered without interference of chewing or swallowing.)

IV. Instruct patient in postgingivectomy care

A. Report to office immediately if dressing breaks away or drops loose

(NOTE: If small pieces drop loose and no pain is felt, the patient need not report to the office.)

JOB SHEET #4

B. Return in one to two weeks for removal or replacement of dressing

C. Rinse mouth with diluted antiseptic solution

D. Eat food of choice, except highly seasoned foods, alcohol, and citrus fruits

E. Refrain from smoking

F. Avoid excessive exercise

(NOTE: If excessive bleeding occurs which cannot be controlled with cold compresses, the patient should report to the office.)

PERIODONTICS
UNIT V

JOB SHEET #5--ASSIST WITH REMOVAL OF PERIODONTAL SURGICAL DRESSING

(NOTE: The chairside assistant in expanded functions may be expected to apply topical medication and replace surgical dressing, under the supervision of the doctor.)

I. Equipment

   A. Antiseptic solution (mouthwash)

   B. Paper cup

   C. Dental floss

   D. Surgical gauze squares

   E. Cotton pliers

   F. Interproximal knives, assorted

   G. Explorer

   H. Mouth mirror

II. Procedure

   A. Seat patient

   B. Drape patient

   C. Instruct patient

   D. Hand interproximal knife to doctor

   (NOTE: The dentist begins at the posterior, placing the blade of the knife through the interproximal spaces, then gently draws into the mass of periodontal dressing to break it free. The process is repeated through subsequent interproximal spaces toward the anterior teeth in the quadrant.)

   E. Apply explorer to remove small pieces of dressing until all material is removed

   (NOTE: In case of hemorrhaging, the dentist will apply a postsurgical dressing for control of hemorrhage.)

JOB SHEET #5

F. Use warm water spray to flush the quadrant

G. Assist dentist in checking for remaining pieces of dressing

H. Assist in passing dental floss gently through contact area to remove any small pieces of dressing

I. Hand patient paper cup filled with mouthwash and ask patient to rinse mouth

J. Use warm water spray to gently rinse oral cavity

K. Determine patient's readiness for surgery of the other quadrant and make appointment accordingly

L. Instruct patient in home care treatment

M. Dismiss patient

N. Clean operatory

PERIODONTICS
UNIT V

JOB SHEET #6--ASSIST WITH TREATMENT OF ACUTE PERICORONITIS

I. Equipment

  A. Topical anesthetic and syringe, prepared for infiltration

  B. Aspirator tip

  C. Curved hemostat

  D. Surgical knife

  E. Scissors

  F. Gauze 2 x 2

  G. Mirror

  H. Scaler

II. Procedure

(NOTE: Treatment for an inflamed pericoronal flap normally will require two office visits--the first to remove debris and inflammation, the second to remove the flap.)

  A. First visit

    1. Seat patient

    2. Adjust chair

    3. Adjust light

    4. Place radiographs on view box

    5. Hand dentist mouth mirror and explorer

    6. Use aspirator while dentist is removing debris and fluid from flap (Figures 1 and 2)

FIGURE 1

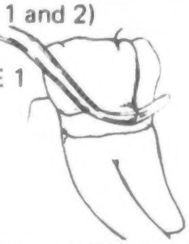
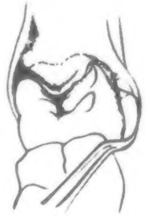


FIGURE 2



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JOB SHEET #6

7. Instruct patient to rinse mouth with saline solution

8. Remind dentist to give patient prescription if needed

B. Second visit

1. Instruct patient in procedure for tissue flap removal

2. Hand doctor mirror and explorer to check for swelling

3. Receive explorer with left hand

4. Hand and receive topical anesthesia

5. Hand syringe with right hand

   (NOTE: Make sure the syringe is out of sight of the patient.)

6. Receive syringe with left hand and hand tissue to patient

7. Hand forceps to doctor with left hand and scissors with right hand

8. Observe doctor cutting tissue flap (Figure 3) and results (Figure 4)

FIGURE 3

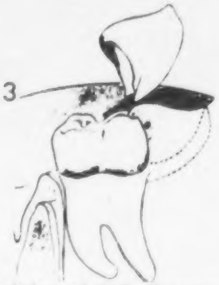
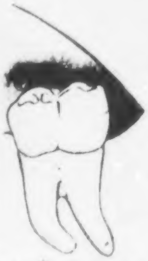


FIGURE 4



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9. Use 2 x 2s to blot excess blood

10. Receive tissues, forceps, and scissors

11. Dismiss patient

PERIODONTICS
UNIT V

TEST

NAME ____ SCORE ____________________

1. Match terms associated with periodontics to their definitions. Write the correct numbers in the blanks provided.

_____a. Mechanical scraping of surface of tooth roots for removal of bacteria and necrotic tissue

_____b. Inflammation of the periodontal membrane and ligaments

_____c. Fibrous growth extending from the epithelium of the gingiva

_____d. Connective tissue cells and young blood vessels formed during repair of a wound

_____e. A space; trench bound by epithelial tissue and marginal gingiva

_____f. Process of depositing newly manufactured cells

_____g. Thin layer of bone located on root side of alveolus, containing the tooth

_____h. Severing and relocation of frenum

_____i. Forklike division in roots of teeth

_____j. Below the free gingival crest

_____k. Above the gingival crest

_____l. Inflammation of soft tissue over crown of an erupting tooth

_____m. Destruction of supportive tissue of tooth; non-inflammatory

_____n. Surgical removal of entire frenum

_____o. Branch of dentistry which deals with prevention and treatment of diseases of the bone and soft tissues surrounding the teeth

1. Deposition
2. Epulis
3. Furcation
4. Lamina dura
5. Root planing
6. Subgingival (infra-gingival)
7. Sulcus
8. Supragingival
9. Periodontosis
10. Periodontitis
11. Pericoronitis
12. Periodontics
13. Frenectomy
14. Frenotomy
15. Granulation tissue

2. Select from the list below results of accumulation of plaque and calculus. Mark each correct answer with an "X."

______a. Causes pocket formations from reactions of plaque and calculus

______b. Causes pink stippled gingiva

______c. Creates possibility of toxigenic bacteria

______d. Reduces tissue tolerance

______e. Forms on occlusal surfaces of tooth

______f. Promotes pleasant breath

______g. Leads to tissue breakdown

______h. Causes inflammatory responses

3. State characteristics of periodontal disease in the blanks below.

a. ______________________________

b. ______________________________

c. ______________________________

4. Describe purposes of periodontal therapy in the blanks below.

____

____

____

____

5. Select from the list below observations made by dentist during periodontal examination. Mark each correct answer with an "X."

______a. Radiographs

______b. Bruxism (grinding of teeth)

______c. Dental caries

______d. Depth of pockets in gum (gingiva)

______e. Overhanging margins

______f. Sensitivity and mobility of teeth

______g. Condition of oral cavity

6. Describe duties of dental assistant during periodontic examination and treatment in the blanks below.

   a. Examination--____________________

   ____

   ____

   ____

   b. Treatment–____________________

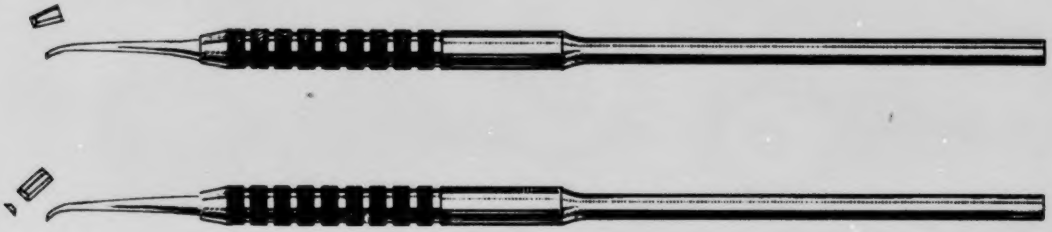
   ____

   ____

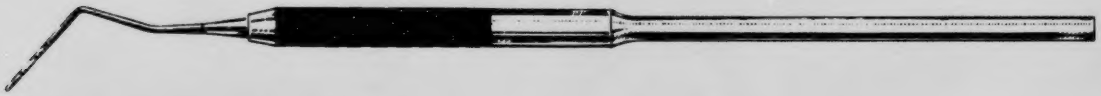
   ____

7. Identify the instruments used in periodontics shown below. Write the correct names in the blanks provided.

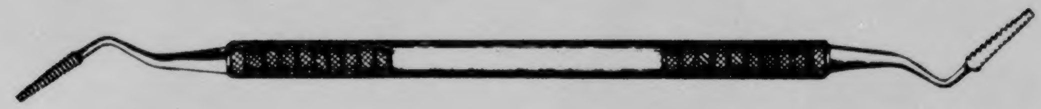
   Scaler
   Hoes
   Explorer #17
   Curettes
   Pocket marker
   Hoe scalers
   Periodontal pocket probe(probe)
   Interproximal file
   Periodontal knife
   Angle chisels
   Interproximal knife



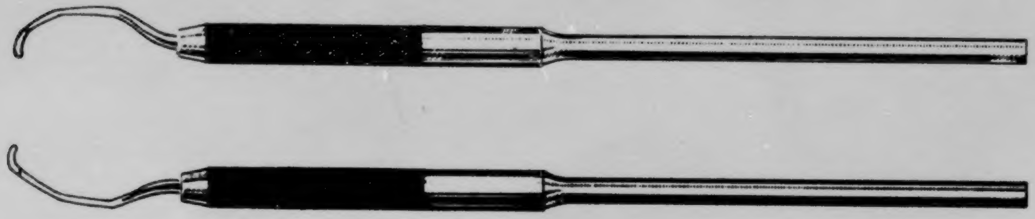
a. ____________________



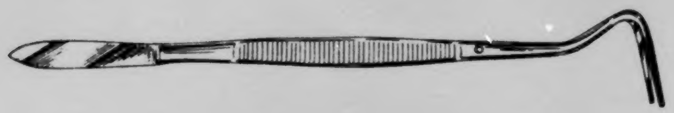
b. ____________________



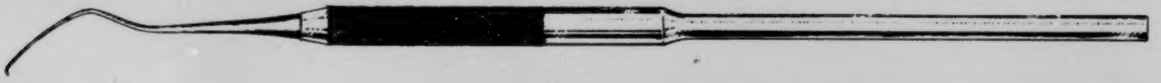
c. ______________________________



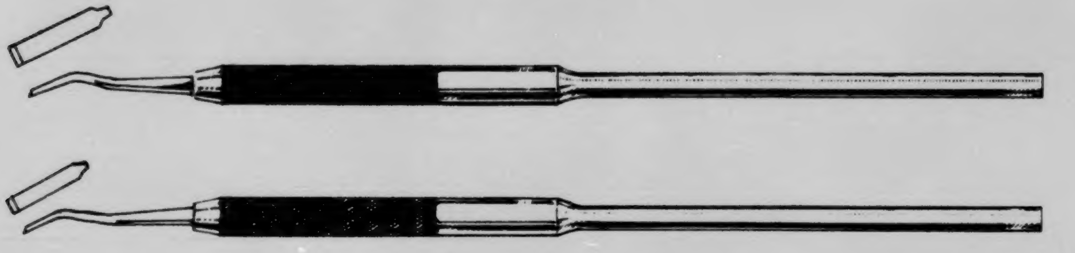
d. ______________________________



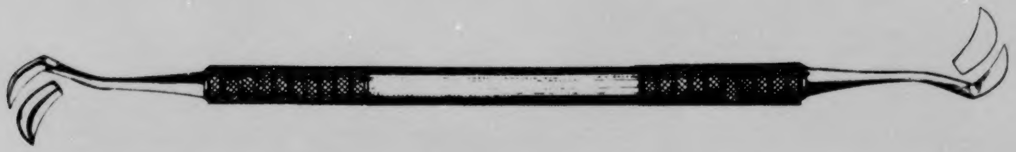
e. ______________________________



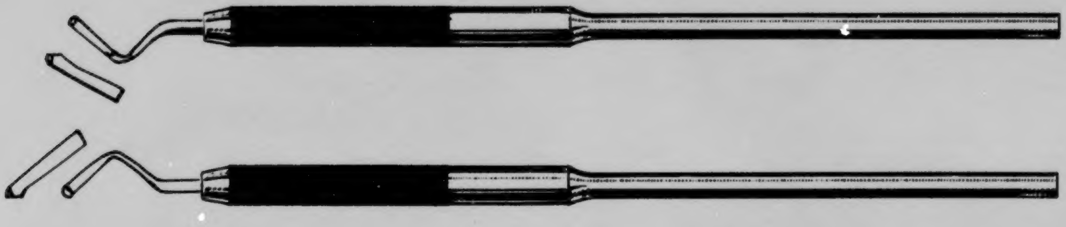
f. ______________________________



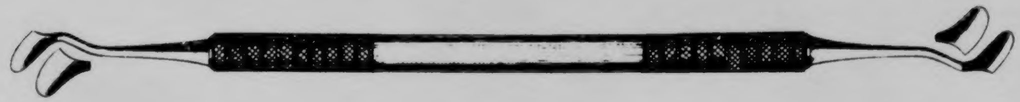
g. ______________________________



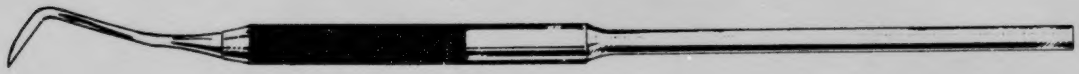
h. ______________________________



i. ______________________________



j. ______________________________



k. ______________________________

8. Match perio instruments to their uses. Write the correct numbers in the blanks provided.

______a. Used in supra- and subgingival calculus in posterior teeth	1. Interproximal file
______b. Used for heavy deposits of calculus	2. Probe
______c. Used to measure or record depth of a gingival pocket	3. Hoe
______d. Used in posterior teeth for difficult calculus	4. Hoe scaler

_____e. Used to press small holes in gingiva to mark depth of inflammation or pockets

_____f. Used in proximal surfaces of teeth

_____g. Used to detect calculus and caries

_____h. Used for removal of tissue between teeth

_____i. Used to adapt subgingival calculus to convexity of a tooth

_____j. Used for removal of degenerative tissue

_____k. Used for removal of subgingival calculus

5. Scaler
6. Curette
7. Angle chisel
8. Perio knife
9. Interproximal knife
10. Explorer
11. Pocket marker

9. Record patient's health history.

10. Chart perio findings during examination.

11. Demonstrate the ability to:

    a. Assist with scaling and subgingival curettage.

    b. Assist with occlusal adjustment.

    c. Assist with gingivectomy.

    d. Assist with placement of periodontal dressing (postgingivectomy.)

    e. Assist with removal of periodontal surgical dressing.

    f. Assist with treatment of acute pericoronitis.

    (NOTE: If activities 9-11 have not been finished before the test, ask your instructor when they should be completed.)

PERIODONTICS
UNIT V

ANSWERS TO TEST

1.

a.	5	i.	3
b.	10	j.	6
c.	2	k.	8
d.	15	l.	11
e.	7	m.	9
f.	1	n.	13
g.	4	o.	12
h.	14		

2. a, c, d, g, h
3. a. Progressive
    b. Cannot be self-cured
    c. Results in loss of supportive bone and teeth
4. Description should include:
    a. To remove factors which are responsible for the disease
    b. To restore tissues to a sound physiological condition
5. a, b, d, f, g
6. Description should include:
    a. Examination
        1) Record condition of patient's general and oral health
        2) Record condition of oral cavity
        3) Chart readings of pocket depth of gingival sulcus
    b. Treatment
        1) Record types of pre- and post-medication
        2) Record prescription
        3) Assist with all surgical procedures

7. a. Hoes
   b. Periodontal pocket probe (probe)
   c. Interproximal file
   d. Curettes
   e. Pocket marker
   f. Explorer #17
   g. Angle chisels
   h. Interproximal knife
   i. Hoe scalers
   j. Periodontal knife
   k. Scaler
8. a. 3 g. 10
   b. 1 h. 9
   c. 2 i. 6
   d. 4 j. 8
   e. 11 k. 5
   f. 7
9. Evaluated to satisfaction of instructor
10. Evaluated to satisfaction of instructor
11. Performance skills evaluated to satisfaction of instructor

ENDODONTICS
UNIT VI

UNIT OBJECTIVE

After completion of this unit, the student should be able to assist with endodontic examination and treatment. The student should also be able to prepare an endodontics tray setup and prepare bacterial cultures. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with endodontics to the correct definitions.
2. Select from a list purposes of endodontic treatment.
3. Select from a list duties of the dental assistant in endodontics.
4. Match types of pulpal pain to their descriptions.
5. Match endodontic instruments to their uses.
6. Label root canal instruments used in endodontics.
7. Discuss use of the glass bead (salt) sterilizer.
8. Select from a list intra-canal medications.
9. Arrange in order steps in endodontic cavity preparation.
10. Match examination methods for endodontic emergencies to the correct definitions.
11. Demonstrate the ability to:
    a. Assist with endodontic examination.
    b. Prepare tray setups for canal instrumentation.
    c. Prepare bacterial cultures.

ENDODONTICS
UNIT VI

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

- A. Order film.

  (NOTE: Write to Veterans Administration for a free film catalog. Address is on next page under Films.)

- B. Make transparencies.
- C. Provide students with objective sheet.
- D. Provide students with information and job sheets.
- E. Discuss unit and specific objectives.
- F. Discuss information and job sheets.
- G. Provide student with equipment and materials for Job Sheets #1 through 3.
- H. Demonstrate and discuss procedures outlined in job sheets.
- I. Have students prepare tray setups without job sheets after they have learned the instruments.
- J. Explain to student that procedures will vary from office to office.
- K. Give test.

II. Instructional materials:

- A. Objective sheet
- B. Information sheet
- C. Transparency masters
  1. TM 1–Canal Entry for Anterior Teeth
  2. TM 2–Canal Entry for Posterior Teeth
- D. Job sheets
  1. Job Sheet #1–Assist with Endodontic Examination
  2. Job Sheet #2--Prepare Tray Setups for Canal Instrumentation
  3. Job Sheet #3–Prepare Bacterial Cultures

E. Test

F. Answers to test

III. Unit references:

A. Ingle, John I. *Endodontics.* Philadelphia: Lea & Febiger, 1965.

B. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W.B. Saunders Co., 1976.

C. *Dental Specialist.* U.S. Army: Washington, D.C., 1971.

IV. Films:

(NOTE: These films are available from the Veterans Administration, Central Office Film Library (037B1), 810 Vermont Avenue N.W., Washington, D.C. 20420.)

A. "Endodontics: Preparation of the Root Canal, Part I." 16 mm film or color slides, 15 mins. 1972.

B. "Endodontics: Preparation of the Root Canal, Part II." 16 mm film or color slides, 10 mins. 1972.

C. "Endodontics-Retrograde Amalgam Procedure." 16 mm, color, 1978.

(NOTE: The procedure for a retrograde amalgam filling procedure is demonstrated in detail, including pre-operative radiographs, local anesthesia, flap design and apicoectomy.)

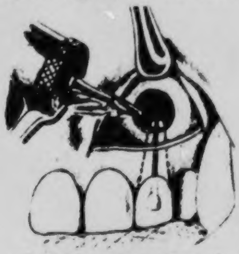
ENDODONTICS
UNIT VI

INFORMATION SHEET

I. Terms and definitions

   A. Endodontics--Diagnosis and treatment of disease of pulp and periapical tissues

   B. Apicoectomy--(Apico = apex, ectomy = removal) Surgical removal of apex of tooth through an opening in alveolus overlying the apex



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   C. Debridement--Removal of infectious inflamed pulpal fibers of root

   D. Enucleation--Removal of a cyst or sac in one piece

   E. Fistula--Abnormal passageway

   Example: A fistula of an abscessed tooth provides an unnatural opening on the surface of the mucosa

   F. Hyperactive pulp--Overreaction of pulp to a stimulus, caused by infection

   G. Hypoactive pulp--Lack of reaction of pulp

   Example: Pulp that is dying

   H. Incubation--Warmth provided to promote growth of microbial cultures

   I. Pulpalgia--Pain in pulp of tooth

   J. Pulpectomy--Complete removal of fibers in pulp from within chambers and canals of teeth roots

   K. Purulent--Consisting of or containing pus

II. Purposes of endodontic treatment

   A. Prevents loss of a tooth needed for an abutment bridge

   B. Improves aesthetic (personal appearance) quality of natural teeth with a jacket crown or fixed bridge

INFORMATION SHEET

C. Prepared nonvital root provides retention for a jacket crown

D. Provides retained teeth to aid in preserving dental arch

III. Duties of the dental assistant in endodontics

(NOTE: In some states you may be permitted the responsibility for irrigating the root canal under treatment. Not all states permit the duties listed below.)

A. Place rubber dam

B. Sterilize operating field

C. Expose and process X-rays

D. Obtain and prepare culture

E. Assist with canal preparation

F. Place medicinal agents

G. Place temporary seal in access cavity

IV. Types of pulpal pain

(NOTE: Regional pain in the head area identified as being pulpal is referred to as pulpalgia.)

A. Hyperactive pulpalgia--Pain from pulp that is hypersensitive to stimulus

Examples: Cold air, shock of metal, touching cementum with fingernail

(NOTE: In most cases the pulp may be treated with an insulating base material.)

B. Moderate acute pulpalgia--Discomfort that usually occurs over a period of time; sometimes caused by decayed teeth in opposite arch

C. Chronic pulpalgia--Vague pain caused by a tooth that has decayed over a long period of time

D. Necrotic pulp--Death of pulp due to disease or injury

E. Traumatic occlusion--Pain due to tooth not in proper occlusion

(NOTE: Treatment may be only reducing the tooth slightly so that the occlusion is not impaired.)

F. Incomplete fracture--Split or incomplete break in crown

(NOTE: If the split exposes the pulp, bacterial involvement may require removal of the tooth.)

INFORMATION SHEET

V. Endodontic instruments and their uses

(NOTE: Endo instruments must be made of unbreakable steel, and be able to withstand sterilization in the autoclave. Small endo instruments are usually kept in a compartmentalized box, and the complete kit is sterilized in the autoclave.)

A. Broaches--Remove bits of pulp from canal

B. Reamers--Enlarge canal during process of endodontic treatment

C. Files--Clean inside of canal

D. Rattail files--Remove fibrous tissue remaining in canal

E. Points--Clean and sterilize canal

F. Stops--Keep files, reamers and broaches from going too far into canal

(NOTE: The stops are placed on the end of instruments A-E.)

G. Test file gauges--Compare length of instrument with that of canal seen on X-ray of tooth

H. Spreaders (dryers)--Place medication or gutta-percha points into canal

I. Syringes--Used for irrigating canals

(NOTE: This may be a 2cc to 5cc luerlock syringe with a blunt or disposable needle.)

J. Root canal guns--Carry and eject amalgam into canal to fill canal apex

K. Pluggers--Place medication in narrow spaces

L. Excavators--Remove debris

M. Plastic instruments (double-ended)--Transfer, place and adapt gutta-percha points or plastic filling material into canal

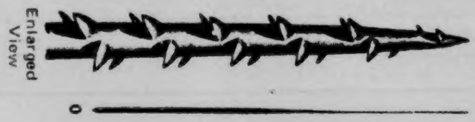
N. Aspirators--Tip connectors for vacuum to remove debris from tooth

INFORMATION SHEET

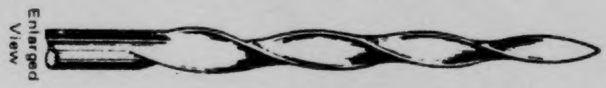
VI. Root canal instruments used in endodontics

(NOTE: The broach, reamer and file come in various sizes.)

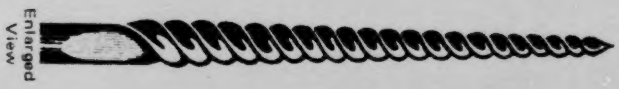
A. Root canal broach



B. Root canal reamer

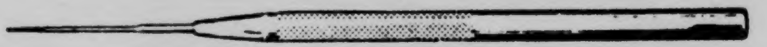


C. Root canal file



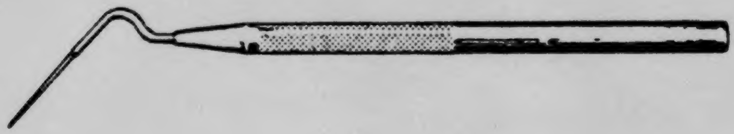
D. Root canal plugger (straight)

(NOTE: This comes in sizes #1, 3, and 5.)

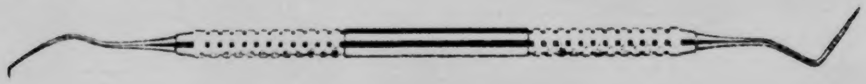


E. Root canal plugger (curved)

(NOTE: This comes in sizes #7, 9 and 11.)



F. Explorer (periodontal)



VII. Glass bead (salt) sterilizer

A. Used at chairside

B. Uses glass beads 1 to 2 mm in diameter or ordinary table salt

INFORMATION SHEET

C. Retains heat 218° to 246°C (425° to 475°F)

D. Requires insertion of root canal instruments for fifteen to twenty seconds

(NOTE: Larger metal instruments may require 20 to 30 seconds.)

VIII. Intra-canal medications

A. Irrigating solutions

B. Disinfectants

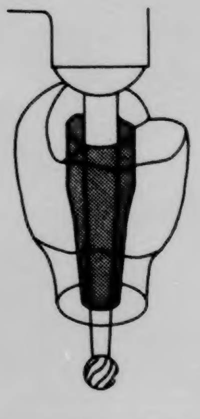
Examples: Phenolic compounds, salts

C. Temporary medicated dressings (choice)

Examples: Phenol, formocresol

IX. Steps in endodontic cavity preparation

A. Enlarge coronal cavity with #4 surgical-length bur to accommodate shaft without touching cavity wall



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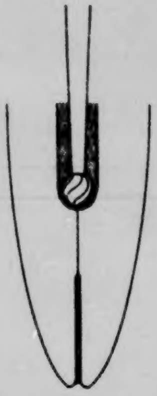
INFORMATION SHEET

B. Open canal with #4 surgical bur following pulp line



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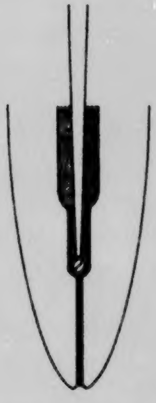
C. Use a #2 surgical-length bur to deepen penetration

(NOTE: Repeated X-rays are needed to judge the progress of the instruments.)



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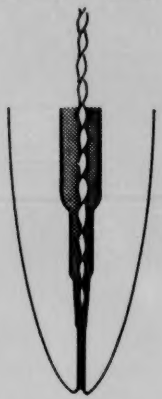
INFORMATION SHEET

D. Use fine reamer to explore and finally enlarge canal



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X. Methods of examination for endodontic emergencies

A. Percussion--Tapping tooth with firm object to determine extent of sensitivity

B. Mobility--Movement of infected or injured tooth shows effects on supporting tissue

C. Palpation--Compares side of mouth not affected by swelling and pain

D. Pulp vitality test--Touches tooth with tip of vitalometer after application of toothpaste

(NOTE: If the tooth is inflamed, the patient registers a response to the stimulus. If the tooth is nonvital, it does not respond to the electrical stimulus.)

E. Thermal pulp test--Uses ice in a gauze square or heat to touch tooth

F. Transillumination--Uses intense light to reflect through anterior teeth to detect if tooth varies from other teeth

(NOTE: Anterior teeth are not as dense in structure as posterior teeth, which enables this type of examination to be done.)

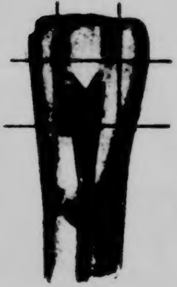
G. Cavity test--Uses a spoon to remove decay

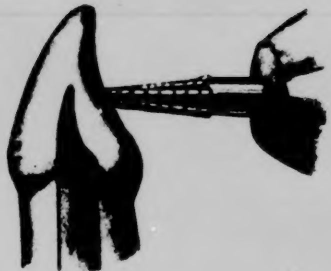
(NOTE: If the canal is vital the blood will be red; if not, the blood will be dark.)

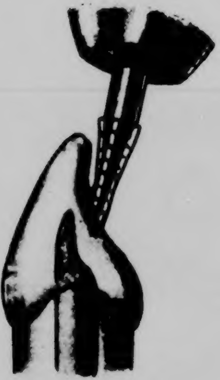
H. Radiograph--Method of determining exact location of reamer during endodontic treatment

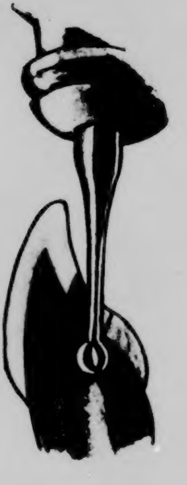
I. Cultures--Determine presence of microorganisms in root canal

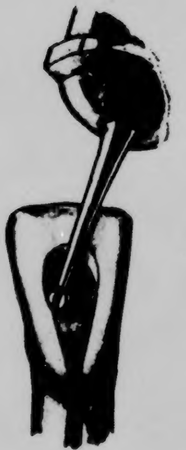
Canal Entry for Anterior Teeth

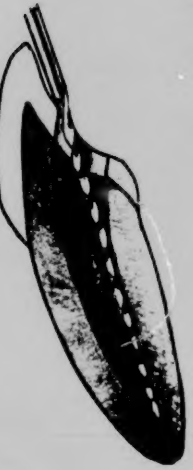












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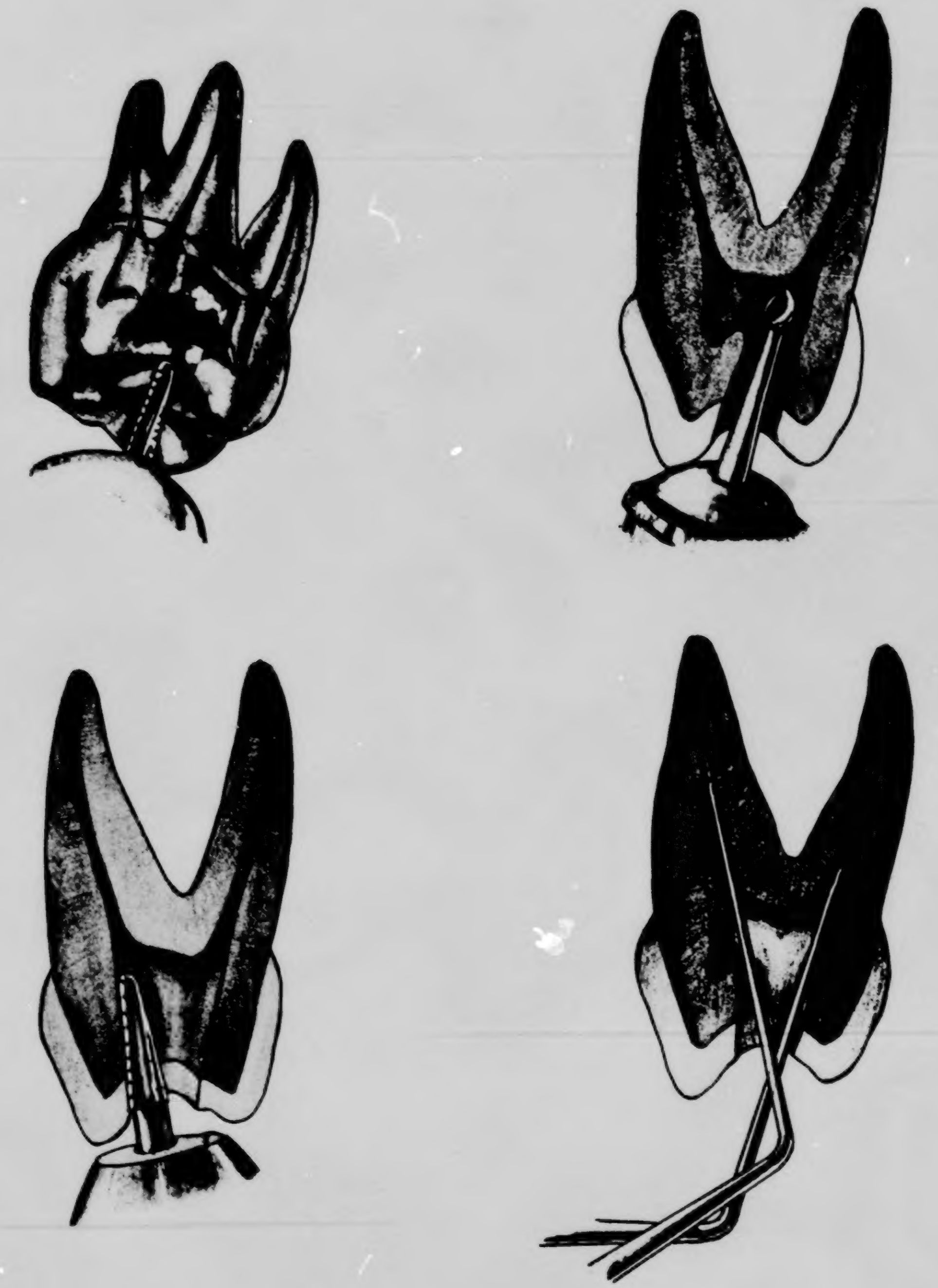
Canal Entry for Posterior Teeth



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ENDODONTICS
UNIT VI

JOB SHEET #1--ASSIST WITH ENDODONTIC EXAMINATION

I. Equipment

  A. Mirror

  B. Explorer

  C. Periodontal probe

  D. Electric pulp tester

  E. Curette

  F. Cotton pliers

  G. Articulating paper

  H. Plastic instrument

  I. Cotton gauze 2 x 2s and cotton rolls

  J. Antiseptic and toothpaste

  K. Ice and gutta-percha

  (NOTE: The ice is stored in empty anesthetic cartridges for pulp testing.)

  L. Bunsen burner

II. Procedure for using pulp tester

  A. Seat and drape patient

  B. Wash hands

  C. Explain procedure to patient

  Example: Assure patient that there will be some discomfort involved, that the tester will cause a warm feeling or a tingling if the tooth is still vital

  D. Instruct patient to signal as soon as he or she feels the sensation

  E. Isolate tooth with cotton rolls

  F. Use gentle blast of air when drying tooth as it may be sensitive

  G. Wipe tip of electric pulp tester with 2 x 2 dipped in antiseptic, then dry tip and dip into small amount of toothpaste

JOB SHEET #1

H. Hand working end of pulp tester to doctor and pick up rheostat which controls current

I. Increase current as directed by dentist

J. Record findings on patient's chart

III. Procedure for using cold and heat

A. Cold

1. Remove ice from cartridge by holding cartridge tightly. In a few minutes ice will melt enough to slide from cartridge when tapped lightly

2. Place dry 2 x 2 gauze around one end of ice and hand to doctor with gauze end first

B. Heat

1. Obtain three gutta-percha balls which have already been cut for testing

2. Use cotton pliers to heat balls over bunsen burner

(NOTE: Heat the balls until they are too hot to touch, but still retain their shape.)

3. Scrape off small amount of gutta-percha with the plastic instrument and hand to dentist with the heated end toward you

(NOTE: The extra balls may be needed to test additional teeth.)

4. Observe dentist touching tooth for pulp test

5. Record all findings on patient's chart as directed by doctor

(NOTE: There are many tests to be used in arriving at a diagnosis of pulp problems. The main three have been discussed here.)

ENDODONTICS
UNIT VI

JOB SHEET #2--PREPARE TRAY SETUPS FOR CANAL INSTRUMENTATION

I. Equipment and materials

Tray #1

A. Rubber dam setup
B. Evacuator tip
C. Endodontic explorer
D. Basic tray setup
E. Curette
F. Cotton pliers
G. Scissors
H. Spreader
I. Cotton swabs
J. Syringes (irrigating)
K. Bur block

Tray #2

A. Metaphen and alcohol
B. Broaches
C. Chlorinated soda
D. Cotton pledgets and 2 x 2s
E. Cresanol
F. Dappen dish
G. Glass bead sterilizer
H. Instrument sterilizer kit
I. Rubber stops
J. Cavity cement or base

II. Procedure

A. Gather all equipment and materials for Tray #1
B. Arrange in an orderly manner
C. Gather all equipment and materials for Tray #2
D. Place in an orderly manner
E. Ask instructor to check trays for accuracy

ENDODONTICS
UNIT VI

JOB SHEET #3--PREPARE BACTERIAL CULTURES

(NOTE: Microorganisms are the main cause of pulp irritations and possibly necrosis [*death of tissue*] of the pulp. The dental assistant is expected to obtain and prepare bacterial cultures.)

I. Equipment

   A. Glass slides

   B. Bunsen burner

   C. Gram stain or methylene blue

   D. Sterile absorbent points (reamers)

   E. Glass test tube

   F. Microscope

   G. Sterile endodontic pliers

II. Procedure for smear technique

   (NOTE: The sample is taken from fluid content of the root canal. The tooth is prepared using aseptic technique.)

   A. Place sterile absorbent point into canal

   B. Spread the smear on sterile glass slide

   C. Place fixing solution over smear

      Examples: Gram stain, methylene blue

   D. Pass slide through open flame on bunsen burner

   E. Place slide on microscope platform

   F. Adjust microscope to provide visual examination of microbial activity

   G. Compare microbial activity with type of microorganisms found in a healthy pulp canal

      (NOTE: This examination is usually done by the dentist; the assistant does the preparation.)

JOB SHEET #3

III. Procedure for culture technique

(NOTE: The tooth to be studied is protected by a rubber dam. Both the rubber dam and the crown of the tooth are sterilized before entry into the canal is made.)

A. Using pliers, insert sterile absorbent point into the canal

B. Remove point and discard two or three times

(NOTE: This is done to wipe or dispose of any antiseptic from surface of root canal.)

C. Insert point into canal and leave for one minute

(NOTE: This is done to allow absorbent point to soak up moisture.)

D. Remove absorbent point from canal

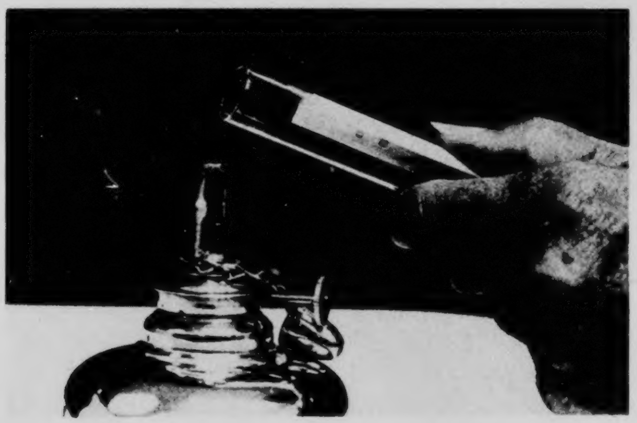
(NOTE: In a multirooted tooth, a sample is taken from each root.)

E. Examine point for moisture

F. Use the little finger to unscrew cap on glass tube, turning the tube counterclockwise

G. Pass opening of tube through Bunsen burner flame (Figure 1)

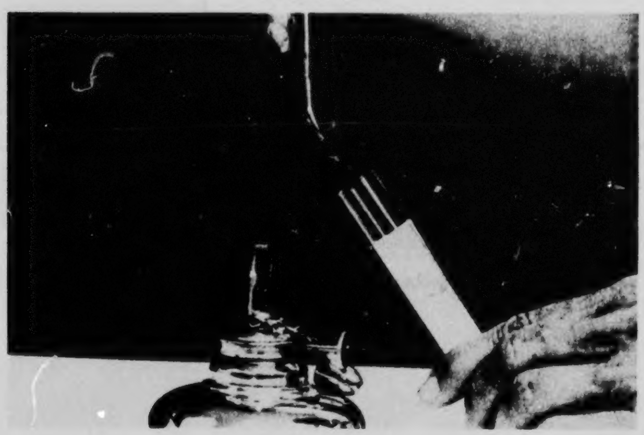
FIGURE 1



JOB SHEET #3

H. Drop absorbent point into culture tube and replace cap (Figure 2)

FIGURE 2



I. Incubate at 98.6°F (37.5°C) for forty-eight hours

(NOTE: A negative medium will appear clear after forty-eight hours; a positive medium will be cloudy. After two clear mediums the dentist will close and cap the tooth.)

ENDODONTICS
UNIT VI

TEST

NAME______________________________ SCORE__________

1. Match terms associated with endodontics to the correct definitions. Write the correct number in the blanks provided.

______a. Removal of a cyst or sac in one piece

______b. Warmth provided to promote growth of microbial cultures

______c. Consisting of or containing pus

______d. Surgical removal of apex of tooth through an opening in alveolus overlying the apex

______e. Abnormal passageway

______f. Complete removal of fibers in pulp from within chambers and canals of teeth roots

______g. Overreaction of pulp to a stimulus, caused by infection

______h. Diagnosis and treatment of disease of pulp and periapical tissues

______i. Lack of reaction of pulp

______j. Pain in pulp of tooth

______k. Removal of infectious inflamed pulpal fibers of root

1. Endodontics
2. Apicoectomy
3. Debridement
4. Enucleation
5. Fistula
6. Hyperactive pulp
7. Incubation
8. Pulpalgia
9. Pulpectomy
10. Purulent
11. Hypoactive pulp

2. Select from the list below purposes of endodontics treatment. Mark each correct answer with an "X."

______a. Aids in straightening of teeth

______b. Prepared nonvital root provides retention for a jacket crown

______c. First stage in gingivectomy

______d. Prevents loss of tooth needed for an abutment bridge

______e. Provides retained teeth to aid in preserving dental arch

______f. Removes supernumerary teeth

______g. Improves aesthetic (personal appearance) quality of natural teeth with a jacket crown or fixed bridge

3. Select from the list below duties of the dental assistant in endodontics. Mark each correct answer with an "X."

______a. Prepare patient for surgery

______b. Drain abscess

______c. Sterilize operating field

______d. Assist with canal preparation

______e. Place temporary seal in access cavity

______f. Prepare hydrocolloid unit

______g. Place rubber dam

______h. Prepare custom tray

______i. Expose and process X-rays

______j. Place space maintainer

______k. Obtain and prepare culture

______l. Place medicinal agents

4. Match types of pulpal pain to their descriptions. Write the correct numbers in the blanks provided.

______a. Death of pulp due to disease or injury

______b. Discomfort that usually occurs over a period of time; sometimes caused by decayed teeth in opposite arch

______c. Vague pain caused by a tooth that has decayed over a long period of time

______d. Split or incomplete break in crown

______e. Pain from pulp that is hypersensitive to stimulus

______f. Pain due to tooth not in proper occlusion

1. Hyperactive pulpagia
2. Moderate acute pulpagia
3. Chronic pulpagia
4. Necrotic pulp
5. Traumatic occlusion
6. Incomplete fracture

5. Match endodontic instruments to their correct uses. Write the correct numbers in the blanks provided.

______a. Clean inside of canal

______b. Compare length of instrument with that of canal seen on X-ray of tooth

______c. Carry and eject amalgam into canal to fill canal apex

1. Broaches
2. Reamers
3. Files

______d. Remove debris

______e. Clean and sterilize canal

______f. Enlarge canal during process of endodontic treatment

______g. Transfer, place, and adapt gutta-percha points or plastic filling material into canal

______h. Remove bits of pulp from canal

______i. Keep files, reamers, and broaches from going too far into canal

______j. Place medication or gutta-percha points into canal

______k. Place medication in narrow spaces

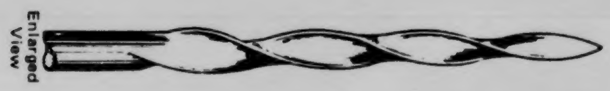
______l. Remove fibrous tissue remaining in canal

______m. Tip connectors for vacuum to remove debris from tooth

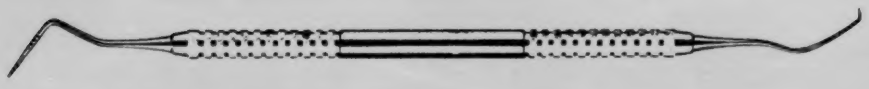
______n. Used for irrigating canals

4. Excavators
5. Points
6. Stops
7. Test file gauges
8. Spreaders (dryers)
9. Plastic instruments (double-ended)
10. Root canal guns
11. Pluggers
12. Rattail files
13. Syringes
14. Aspirators

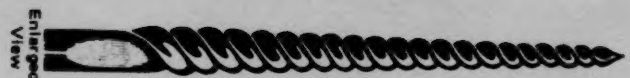
6. Label the root canal instruments used in endodontics shown in the illustrations below. Write the correct names in the blanks provided.



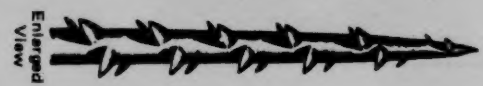
a. ____



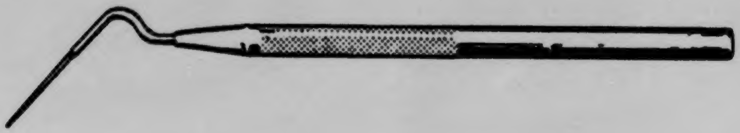
b. ____


Enlarged View

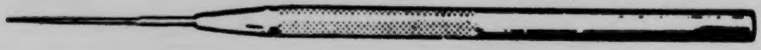
c. ____


Enlarged View

d. ____



e. ____



f. ____

7. Discuss use of the glass bead (salt) sterilizer.

____

____

____

____

8. Select from the list below intra-canal medications. Write an "X" in the correct blanks.

______a. Disinfectants

______b. Temporary medicated dressings (choice)

______c. Gutta-percha

______d. Amalgam

______e. Composite

______f. Irrigating solutions

______g. Dressings

9. Arrange in order steps in endodontic cavity preparation. Write a "1" for the first step, a "2" for the second step, and so on.

______a. Use #2 surgical length bur to deepen preparation

______b. Enlarge coronal cavity with #4 surgical-length bur to accommodate shaft without touching cavity wall

______c. Use fine reamer to explore and enlarge canal

______d. Open canal with #4 surgical bur following pulp line

10. Match methods of examination for endodontic emergencies to the correct definitions. Write the correct numbers in the blanks provided.

______a. Uses a spoon to remove decay

______b. Uses ice in a gauze square or heat to touch tooth

______c. Compares side of mouth not affected by swelling and pain

______d. Method of determining exact location of reamer during endodontic treatment

______e. Uses intense light to reflect through anterior teeth to detect if tooth varies from other teeth

______f. Tapping tooth with firm object to determine extent of sensitivity

______g. Movement of infected or injured tooth shows effects on supporting tissue

______h. Touches tooth with tip of vitalometer after application of toothpaste

______i. Determine presence of microorganisms in root canal

1. Percussion
2. Mobility
3. Palpation
4. Pulp vitality test
5. Thermal pulp test
6. Transillumination
7. Cavity test
8. Radiograph
9. Cultures

11. Demonstrate the ability to:

    a. Assist with endodontic examination.

    b. Prepare tray setups for canal instrumentation.

    c. Prepare bacterial cultures.

    (NOTE: If the above activities have not been finished before the test, ask your instructor when they should be completed.)

ENDODONTICS
UNIT VI

ANSWERS TO TEST

1. a. 4
   b. 7
   c. 10
   d. 2
   e. 5
   f. 9
   g. 6
   h. 1
   i. 11
   j. 8
   k. 3
2. b, d, e, g
3. c, d, e, g, i, k, l
4. a. 4
   b. 2
   c. 3
   d. 6
   e. 1
   f. 5
5. a. 3
   b. 7
   c. 10
   d. 4
   e. 5
   f. 2
   g. 9
   h. 1
   i. 6
   j. 8
   k. 11
   l. 12
   m. 14
   n. 13
6. a. Root canal reamer
   b. Explorer (peridontal)
   c. Root canal file
   d. Root canal broach
   e. Root canal plugger (curved)
   f. Root canal plugger (straight)

7. Discussion should include:

   Glass bead (salt) sterilizer

   a. Used at chairside
   b. Uses glass beads 1-2mm in diameter or ordinary table salt
   c. Retains heat 218° to 246°C (425° to 475°F)
   d. Requires insertion of root canal instruments for fifteen to twenty seconds

8. a, b, f

9. a. 3
   b. 1
   c. 4
   d. 2

10. a. 7
    b. 5
    c. 3
    d. 8
    e. 6
    f. 1
    g. 2
    h. 4
    i. 9

11. Performance skills evaluated to satisfaction of instructor

ORTHODONTICS
UNIT VII

UNIT OBJECTIVE

After completion of this unit, the student should be able to prepare tray setups, assist with orthodontic procedures and instruct orthodontic patients in oral health care. This knowledge will be evidenced by completion of the assignment sheet, job sheets, and unit test with a minimum of 85% accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with orthodontics to the correct definitions.
2. State purposes of orthodontics.
3. Select from a list duties of the dental assistant in orthodontics.
4. Select from a list reasons for orthodontic corrections.
5. Arrange in order types of appointments for orthodontic patients.
6. Identify classes of occlusions.
7. Label types of bonding used in orthodontics.
8. Identify common instruments used in orthodontics.
9. Match common orthodontic instruments to their uses.
10. Distinguish between removable and fixed appliances.
11. Match basic parts of appliances to their uses.
12. Identify types of headgear.
13. Prepare a prescription extraction slip.
14. Demonstrate the ability to:
    - a. Instruct orthodontic patient in oral health care.
    - b. Prepare tray setup for band cementation.
    - c. Prepare tray setup for tying in archwires.

ORTHODONTICS
UNIT VII

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

A. Provide student with objective sheet.

B. Provide student with information and job sheets.

C. Order film.

D. Discuss unit and specific objectives.

E. Invite an orthodontist or orthodontic assistant to speak with class.

F. Reinforce Objective 8 by explaining uses of orthodontic instruments.

Example: Explain how teeth are moved or shifted with appliances

G. Show film and stress legal implications of charting.

H. Provide students with instruments and materials for job sheets.

(NOTE: If you do not have orthodontic instruments in your classroom, borrow an instrument catalog from your orthodontist and cut out pictures of instruments used in this unit to make flash cards.)

I. Demonstrate and discuss procedures outlined in job sheets.

J. Borrow small appliances from your orthodontist to show to students.

Examples: Spacers, bands, archwires, ligature wires

K. Have student take impression and pour and trim study model using orthodontic stone instead of plaster of paris.

L. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment Sheet #1--Prepare a Prescription Extraction Slip

D. Job sheets

1. Job Sheet #1--Instruct Orthodontic Patient in Oral Health Care

2. Job Sheet #2--Prepare Tray Setup for Band Cementation

3. Job Sheet #3--Prepare Tray Setup for Tying In Archwires

III. Unit references:

A. Barton, Rogers E., and Wood, Mathews T. *Dental Assisting. Course VI: Laboratory and Technical Application.* 3rd ed. Chapel Hill: University of North Carolina, 1980.

B. Strickland, William D., and Baker, Benjamin R. *Dental Assisting. Course VII: Clinical Application.* 3rd ed. Chapel Hill: University of North Carolina, 1980.

C. Richardson, Richard E., and Barton, Roger E. *The Dental Assistant.* 4th ed. New York: McGraw-Hill Book Co., 1970.

IV. Films:

A. "Occlusal Radiography. Part I: Introduction and Maxillary Projection." 13 mins., 16mm or 8mm, 1972.

B. "Occlusal Radiography. Part II: Mandibular Projections." 8 mins., 16 mm or 18mm, 1972.

(NOTE: The above films are available from the Veterans Administration, Central Library, 810 Vermont Ave. N.W., Washington, D.C. 20420.)

ORTHODONTICS
UNIT VII

INFORMATION SHEET

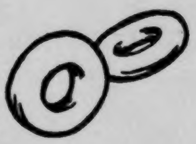
I. Terms and definitions

A. Orthodontics--Branch of dentistry dealing with correction and prevention of irregularities of teeth and jaws

B. Occlusion--Relation of the teeth to each other when jaws are closed

C. Malocclusion--Irregularities of tooth position and occlusion

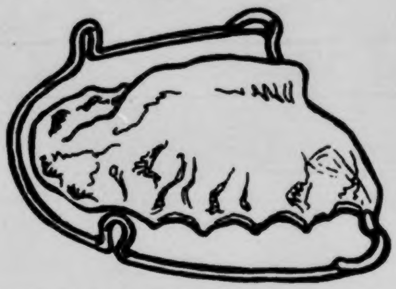
D. Spacers--Small elastic rings placed between teeth to create space for metal bands



E. Retainer--Used to hold teeth in correct position

(NOTE: There are many types of retainers.)

Example:



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F. Labioversion--Outward movement of a tooth from its original position

Example: Away from tongue in lingual arch

G. Prognathic--Having a protruding mandible

H. Retrognathic--Having a receding mandible

I. Bruxism--Grinding of teeth

J. Traumatic--Pertaining to outside force that damages organism

INFORMATION SHEET

K. Ligature--Wire or thread used for tying

Examples: Orthodontic appliances, blood vessels

L. Elicit--To draw forth or bring out

M. Revolution--Act of turning around

N. Protrusion--To thrust forward

O. Tongue thrusting--Constant protrusion of tongue

(NOTE: Tongue thrusting can cause teeth to move, resulting in malocclusion.)

P. Appliance--Device for performing a specific task

II. Purposes of orthodontics

A. Establish a normal functional occlusion

B. Improve facial appearance

C. Aid in keeping teeth

III. Duties of dental assistant in orthodontics

A. Assist in all phases of orthodontic procedures

B. Select and fit bands

C. Mix cement

D. Place cement on bands

E. Select and place separating wires

F. Expose, process and mount intraoral and extraoral radiographs and photographs

(NOTE: The orthodontic assistant may also perform such duties as taking impressions, fabricating study models and removable appliances, ordering supplies, and recording diagnostic records.)

IV. Reasons for orthodontic corrections

A. Shifting due to loss of permanent teeth

B. Missing teeth

(NOTE: This may be caused by heredity or accident.)

INFORMATION SHEET

C. Bruxism

D. Malocclusion

E. Tongue thrusting

F. Mouth breathing

G. Thumb-sucking

(NOTE: Patients are referred to a rehabilitation clinic for help in correcting habits.)

V. Types of appointments for orthodontic patients

A. Examination

B. Radiograph and records

C. Case presentation and consultation

D. Placing removable and fixed appliances

E. Cementation

F. Tying in upper and lower archwires

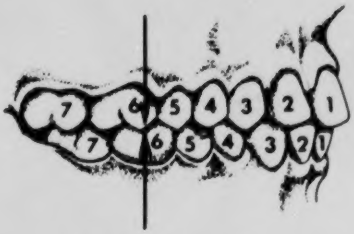
G. Adjustment

(NOTE: This appointment could also be used for construction of stronger upper and lower archwires.)

H. Completion

VI. Classes of occlusions

A. Class I--Maxillary and mandibular teeth in normal relation



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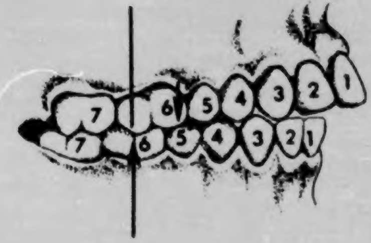
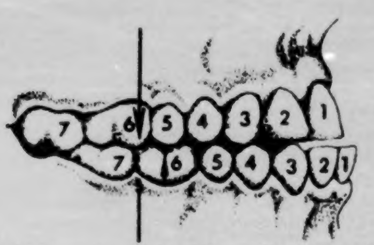
INFORMATION SHEET

B. Class II--Maxillary posterior protrusion



C. Class III--Mandibular posterior protrusion



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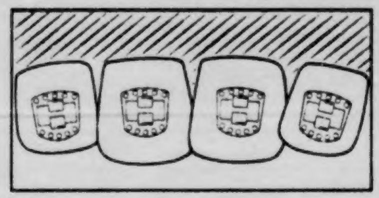
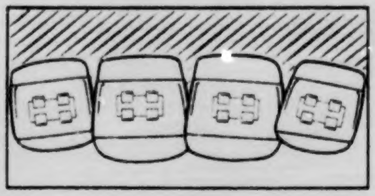
VII. Types of bonding used in orthodontics

A. Direct bond--Bracket cemented onto teeth



B. Cementation--Band with bracket that is cemented around teeth



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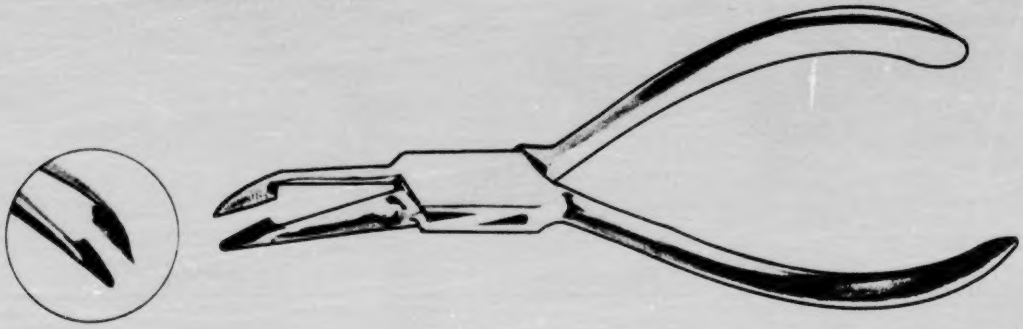
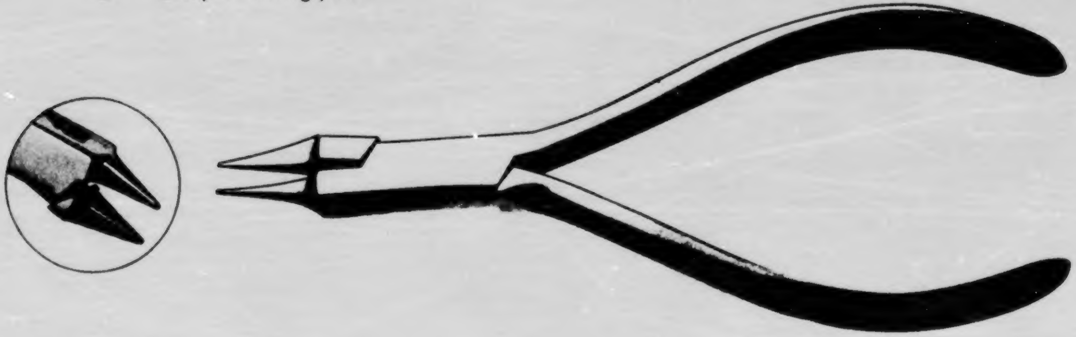
INFORMATION SHEET

VIII. Common instruments used in orthodontics

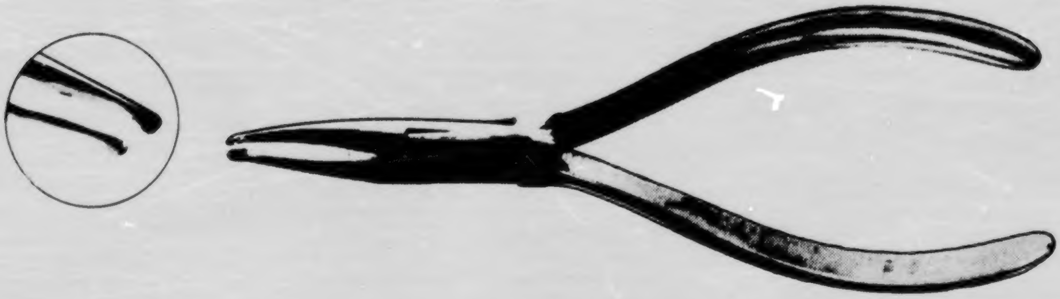
A. Weingart utility plier



B. Loop-forming plier

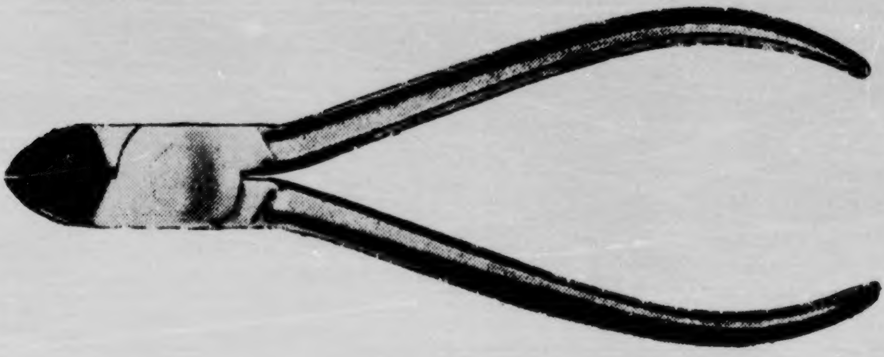


C. Straight How plier

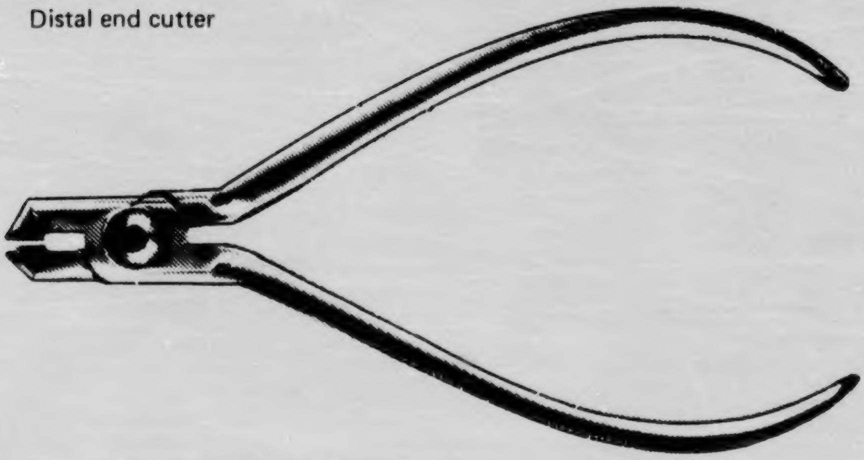


INFORMATION SHEET

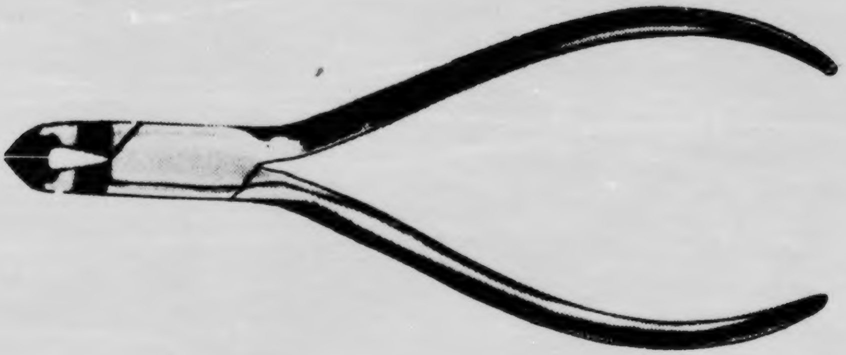
D. Wirecutter



E. Distal end cutter

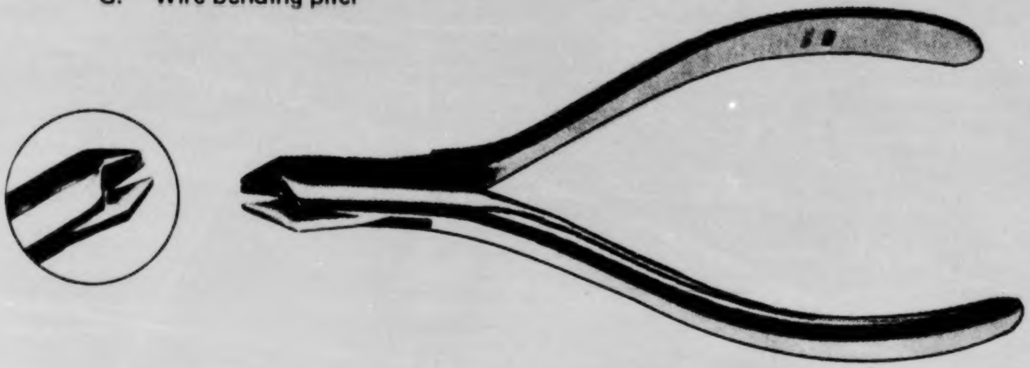


F. Pin and ligature cutting plier

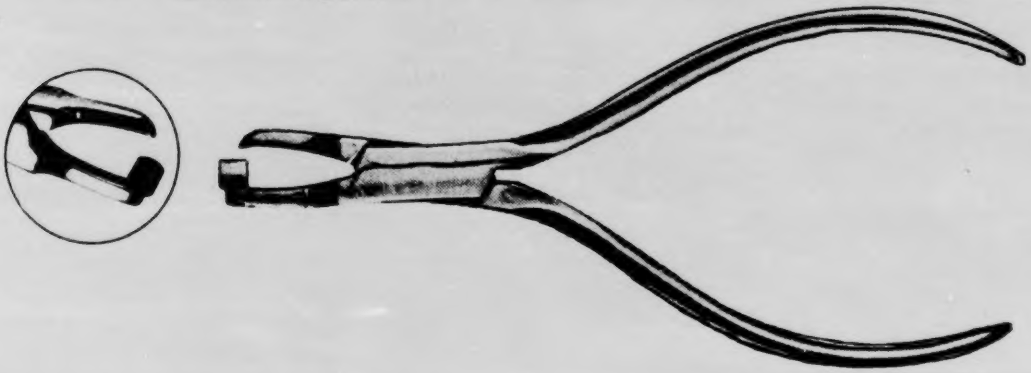


INFORMATION SHEET

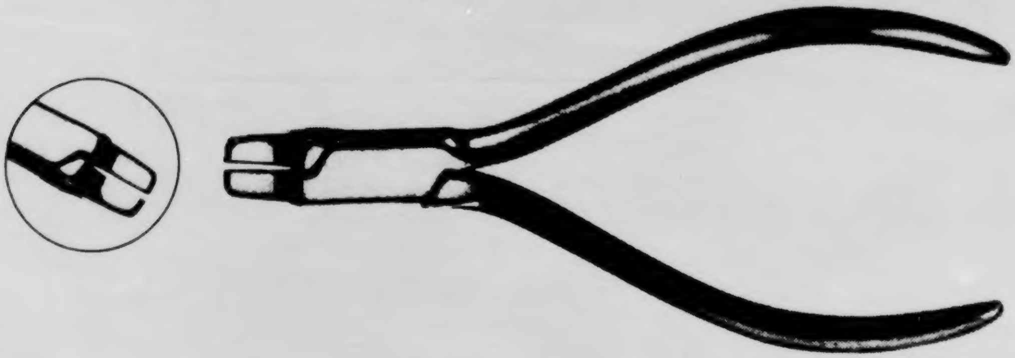
G. Wire bending plier



H. Band removing plier

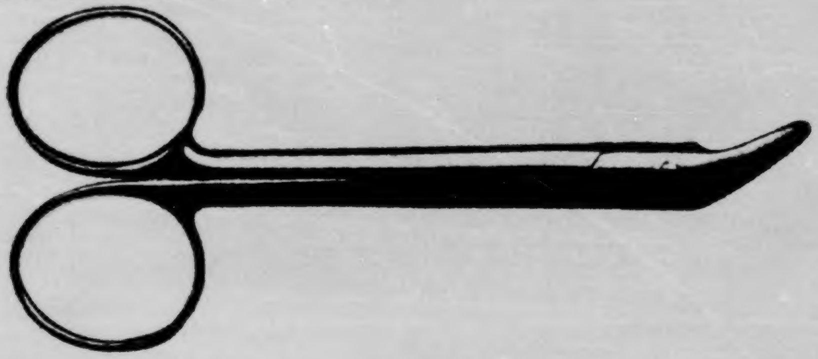


I. Tweed arch bending plier



INFORMATION SHEET

J. Ortho scissors #12S



IX. Uses of common orthodontic instruments

A. Weingart utility plier--Used to remove archwires

B. Loop-forming plier--Used for bending wires

C. Straight How plier--Used mainly for placing and removing archwires on anterior teeth

D. Wire cutter--Used as an all-purpose wire cutter

E. Distal end cutter--Used to cut end of archwire after it is placed and tied in

F. Pin and ligature cutting plier--Used to cut ligatures or take out archwires

G. Wire bending plier--Used on retainers and to adjust headgear

H. Band removing plier--Used to remove bands

I. Tweed arch bending plier--Used to put more strength in rectangular archwires

J. Ortho scissors #12S--Used for cutting ligature wires

X. Removable and fixed appliances

A. Removable--Made of clamp attachments to hold appliance in place while applying force to teeth

B. Fixed--Appliance with several bands or directly bonded brackets attached to teeth

XI. Parts of appliances and their uses

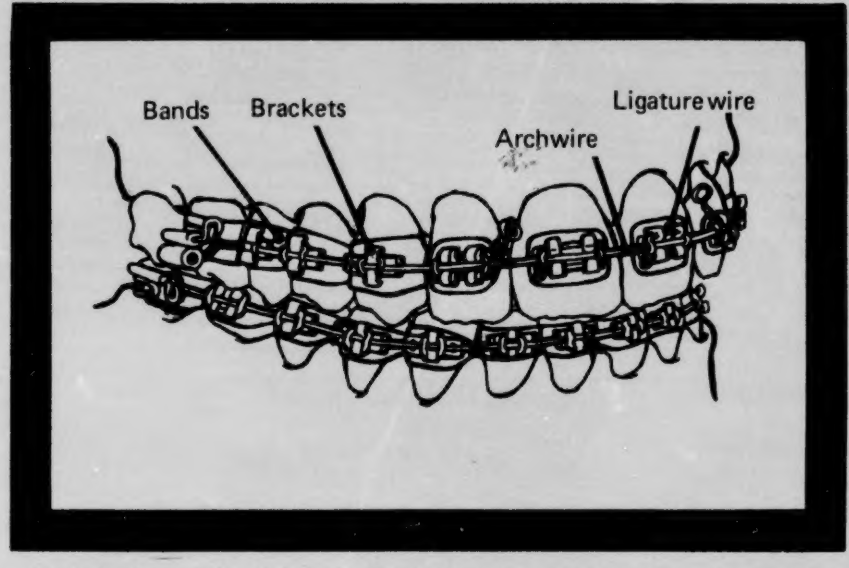
A. Bands--Thin bands of metal that surround teeth and are cemented in place

INFORMATION SHEET

B. Archwires--Fit into brackets on teeth and are ligated into them

(NOTE: Their function is to govern the shape of the arch, level the teeth, and aid in rotation.)

C. Brackets--Attachments welded on bands, or bonded directly onto teeth



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D. Buccal tubes--Attachments on molar bands; means by which ends of labial arch are secured to molar teeth

E. Finger springs--Attached to main archwires to elicit gentle spring forces to individual teeth

F. Coil springs--Usually placed on an archwire and are compressed between teeth

G. Ligature wire–Fine wire that ties main archwire into each bracket

H. Separation wire--Soft wire that is tied around contact points of nearby teeth

(NOTE: By being twisted tightly it creates a force between the teeth, making enough space for bands to be fitted and cemented accurately.)

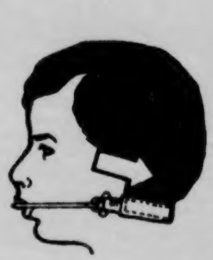
I. Elastics--Rubber bands made especially for orthodontics

(NOTE: Elastics are a common method of exerting force between the upper and lower dental arches in order to bring them in correct relationship with each other.)

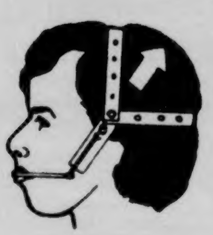
INFORMATION SHEET

XII. Types of headgear

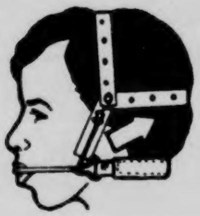
A. Regular



B. High pull



C. Combination



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DA - 351-F

ORTHODONTICS
UNIT VII

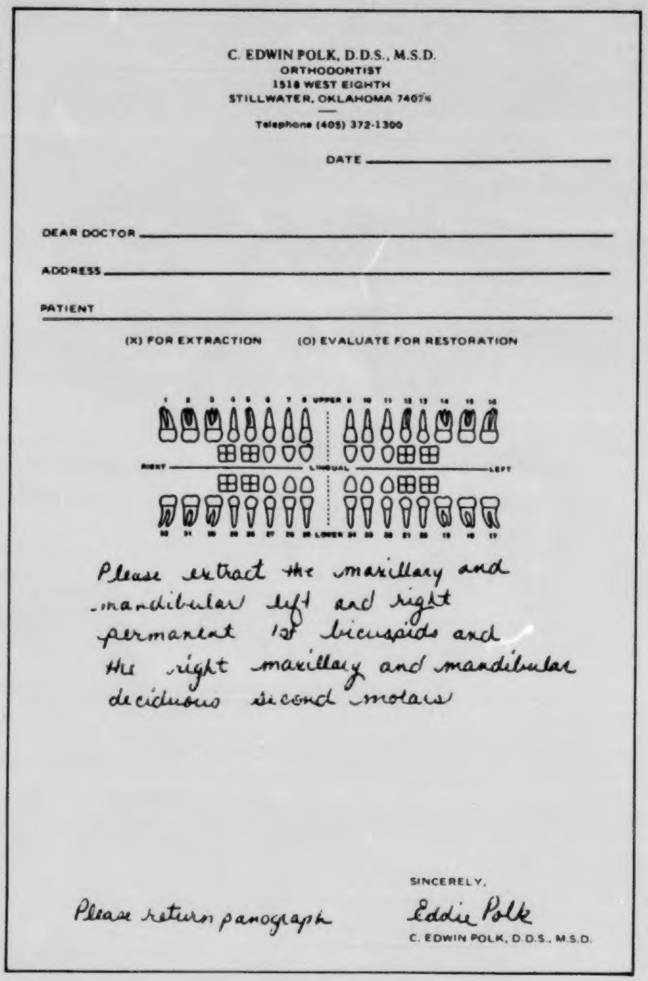
ASSIGNMENT SHEET #1–PREPARE A PRESCRIPTION EXTRACTION SLIP

NAME______________________________ SCORE______________

Sometimes teeth need to be removed before the orthodontist can begin work. It is the duty of the orthodontic assistant to chart and write the prescription extracton slip to be sent to another dentist or oral surgeon.

Would you want the wrong tooth extracted from your mouth? Of course not. This is why it is most important that you chart and write directions exactly as your doctor dictates them to you.

Carefully study the sample prescription slip shown below.



1
2
3
4
5
6
7
8
UPPER
9
10
11
12
13
14
15
16
RIGHT
LINGUAL
LEFT
32
31
30
29
28
27
26
25
LOWER
24
23
22
21
20
19
18
17

C. EDWIN POLK, D.D.S., M.S.D.
ORTHODONTIST
1518 WEST EIGHTH
STILLWATER, OKLAHOMA 74074

Telephone (405) 372-1300

DATE ____________________

DEAR DOCTOR ____________________

ADDRESS ____________________

PATIENT ____________________

(X) FOR EXTRACTION (O) EVALUATE FOR RESTORATION

Please extract the maxillary and mandibular left and right permanent 1st bicuspids and the right maxillary and mandibular deciduous second molars

Please return panograph

SINCERELY,
Eddie Polk
C. EDWIN POLK, D.D.S., M.S.D.

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ASSIGNMENT SHEET #1

Fill in the prescription slip below with the following information:

Referred to Greg Pierce, D.D.S, 200 Sunny St. Patient is Debbie Truitt.

Please extract the maxillary and mandibular left and right permanent 1st bicuspids. If possible, leave in the lower right and left deciduous molars; if not, they may be removed.

C. EDWIN POLK, D.D.S., M.S.D.
ORTHODONTIST
1518 WEST EIGHTH
STILLWATER, OKLAHOMA 74074

Telephone (405) 372-1300

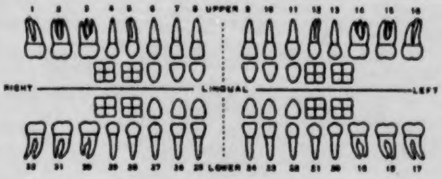
DATE ____________________

DEAR DOCTOR ____________________

ADDRESS ____________________

PATIENT ____________________

(X) FOR EXTRACTION (O) EVALUATE FOR RESTORATION


1 2 3 4 5 6 7 8 UPPER 9 10 11 12 13 14 15 16
RIGHT
LINGUAL
LEFT
32 31 30 29 28 27 26 25 LOWER 24 23 22 21 20 19 18 17

SINCERELY,

C. EDWIN POLK, D.D.S., M.S.D.

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ORTHODONTICS
UNIT VII

JOB SHEET #1--INSTRUCT ORTHODONTIC PATIENT IN ORAL HEALTH CARE

I. Materials

A. Toothbrush (A.D.A. approved)

B. Toothpaste (choice)

C. Perio aids

Examples: Rubber tip on toothbrush, floss threader

D. Water irrigator

E. Fluoride

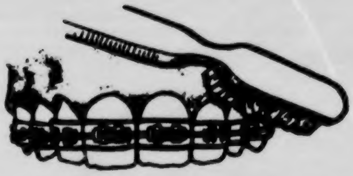
II. Procedure

A. Apply toothpaste

B. Start brushing at the upper right molar area

C. Use circular, vibrating motion around gum line (Figure 1)

FIGURE 1



Used with permission of Ortho-Graphics Inc. from "The Road to a Super Smile," copyright 1977. Susan Gaylord Buxton, artist.

D. Brush slowly and count to ten for each tooth, taking special care in hard-to-clean areas

E. Brush each arch and tooth separately

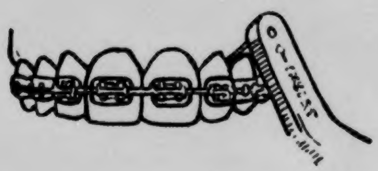
F. Massage gums with toothbrush

JOB SHEET #1

G. Demonstrate use of rubber tip on toothbrush (Figure 2)

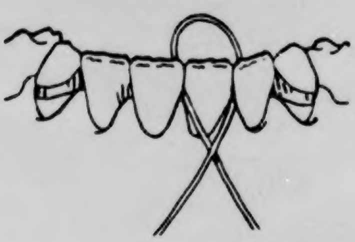
(NOTE: Suggest to patient that use of gum stimulator each night will increase blood circulation in gingiva and aid in cleaning.)

FIGURE 2



H. Demonstrate use of floss threader (Figure 3)

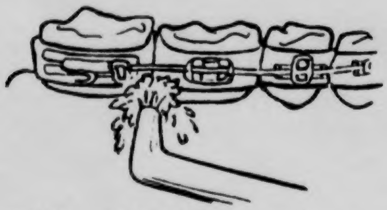
FIGURE 3



I. Demonstrate use of water irrigator (Figure 4)

(NOTE: Suggest that patient use irrigator daily after brushing to remove any bits of food missed in cleaning.)

FIGURE 4



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J. Instruct patient to look in mirror after cleaning teeth to be sure that braces are shiny and gums are firm. If gums are sore or bleeding, patient should rinse with warm salt water

K. Instruct patient to use home fluoride preparation daily, applying it directly to teeth with a toothbrush; do not rinse mouth afterwards

(NOTE: This aids in prevention of caries.)

ORTHODONTICS
UNIT VII

JOB SHEET #2--PREPARE TRAY SETUP FOR BAND CEMENTATION

I. Materials

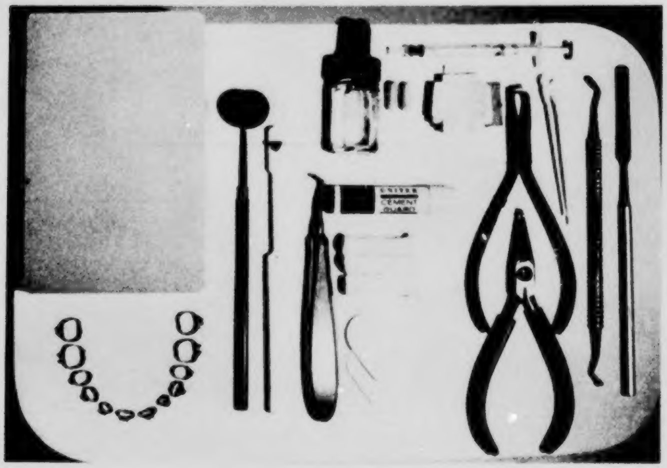
- A. Bands (assorted)
- B. Band pushers
- C. Cement (choice)
- D. Cement guard or waxer
- E. Cotton rolls
- F. Dri-Aids
- G. Mixing slab
- H. Spatula
- I. Tray
- J. Plugger
- K. Bite stick
- L. Band removing plier
- M. How plier
- N. Mirror
- O. Banding tape
- P. 3" cotton-tipped applicators

(NOTE: The slab is frozen to slow the setting time of the cement; this gives the doctor more working time.)

II. Procedure

- A. Gather all instruments
- B. Place on tray
- C. Arrange in order of use (Figure 1)

FIGURE 1



ORTHODONTICS
UNIT VII

JOB SHEET #3--PREPARE TRAY SETUP FOR TYING IN ARCHWIRES

I. Materials

A. Distal end cutting pliers

B. Ligature cutting pliers

C. Ligature director

D. Ligature tying pliers

E. Mirror

F. Plugger

G. Ligatures

H. Ligature scissors

I. Torquing key

(NOTE: This is used to place a rectangular archwire in the brackets.)

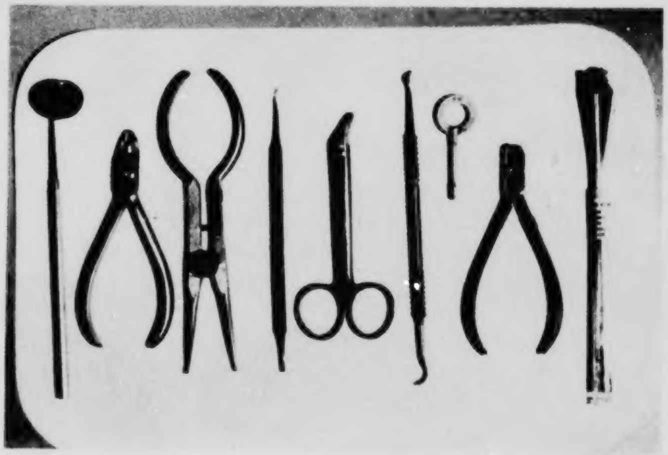
II. Procedure

A. Gather all instruments

B. Place on tray

C. Arrange in order of use (Figure 1)

FIGURE 1



ORTHODONTICS
UNIT VII

TEST

NAME______________________________SCORE______________

1. Match terms associated with orthodontics to their definitions. Write the correct numbers in the blanks provided.

______a. Grinding of teeth

______b. Used to hold teeth in correct position

______c. Irregularities of tooth position and occlusion

______d. To draw forth or bring out

______e. Having a protruding mandible

______f. Branch of dentistry dealing with correction and prevention of irregularities of teeth and jaws

______g. Having a receding mandible

______h. Wire or thread used for tying

______i. Small elastic rings placed between teeth to create space for metal bands

______j. Outward movement of a tooth from its original position

______k. Pertaining to outside force that damages organism

______l. Relation of the teeth to each other when jaws are closed

______m. Act of turning around

______n. To thrust forward

______o. Constant protrusion of tongue

______p. Device for performing a specific task

1. Orthodontics
2. Occlusion
3. Malocclusion
4. Protrusion
5. Retainer
6. Labioversion
7. Prognathic
8. Retrognathic
9. Appliance
10. Traumatic
11. Ligature
12. Elicit
13. Revolution
14. Spacers
15. Tongue thrusting
16. Bruxism

2. State purposes of orthodontics.

a. ______________________________

b. ______________________________

c. ______________________________

3. Select from the list below duties of the dental assistant in orthodontics. Mark each correct answer with an "X."

______a. Expose, process, and mount intraoral and extraoral radiographs and photographs

______b. Mix cement

______c. Assist in all phases of orthodontic procedures

______d. Bend and make archwires

______e. Diagnose cases from X-rays

______f. Select and fit bands

______g. Prepare oral surgery tray

______h. Place cement on bands

______i. Fit retainers

______j. Prescribe medication

______k. Select and place separating wires

4. Select from the list below reasons for orthodontic corrections. Mark each correct answer with an "X."

______a. Abscessed teeth

______b. Discolored anterior teeth

______c. Mouth breathing

______d. Tongue thrusting

______e. Bruxism

______f. Missing teeth

______g. Unerupted teeth

______h. Shifting due to loss of permanent teeth

______i. Thumb-sucking

5. Arrange in order types of appointments for orthodontic patients. Write a "1" for the first appointment, a "2" for the second type of appointment, and so on.

______a. Adjustment

______b. Cementation

______c. Radiograph and records

______d. Completion

______e. Tying in upper and lower archwires

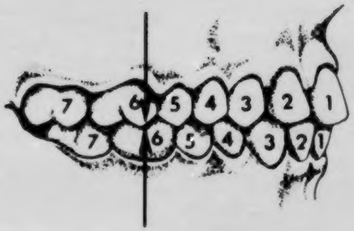
______f. Placing removable and fixed appliances

______g. Examination

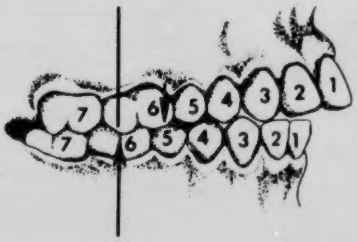
______h. Case presentation and consultation

6. Identify classes of occlusions. Write the correct name in the blanks provided.

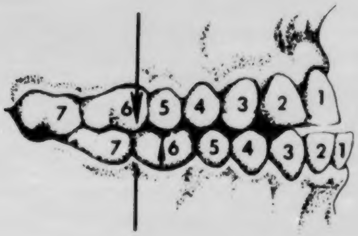
Class III
Class I
Class II


7
6
5
4
3
2
1
7
6
5
4
3
2
1

a. ______________________

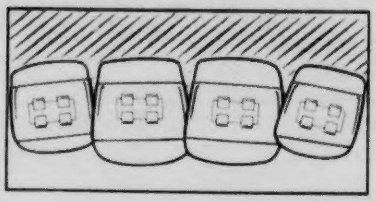

7
6
5
4
3
2
1
7
6
5
4
3
2
1

b. ______________________

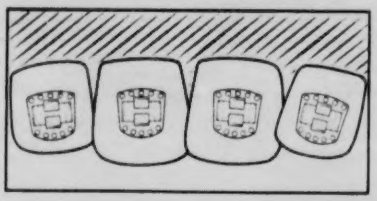

7
6
5
4
3
2
1
7
6
5
4
3
2
1

c. ______________________

7. Label types of bonding used in orthodontics. Write the correct name in the blanks provided.



a. ______________________



b. ______________________

8. Identify common instruments used in orthodontics as shown on the following pages. Write the correct answers in the blanks provided.

Weingart utility plier

Loop-forming plier

Straight How plier

Wire cutter

Distal end cutter

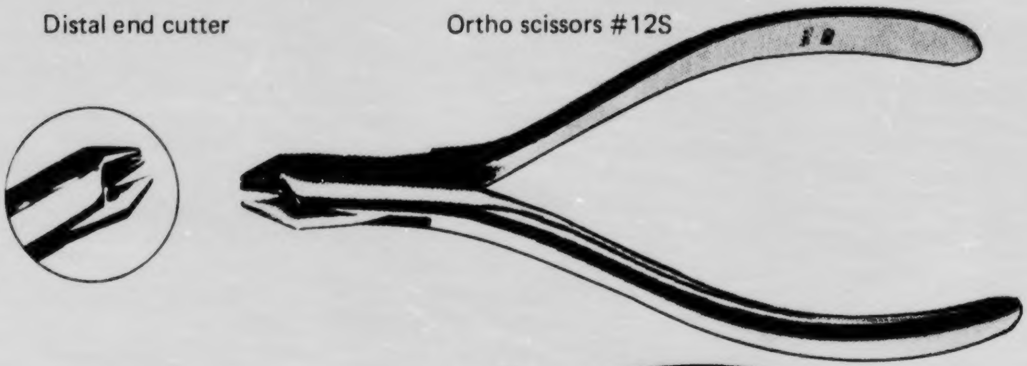
Pin and ligature cutting plier

Wire bending plier

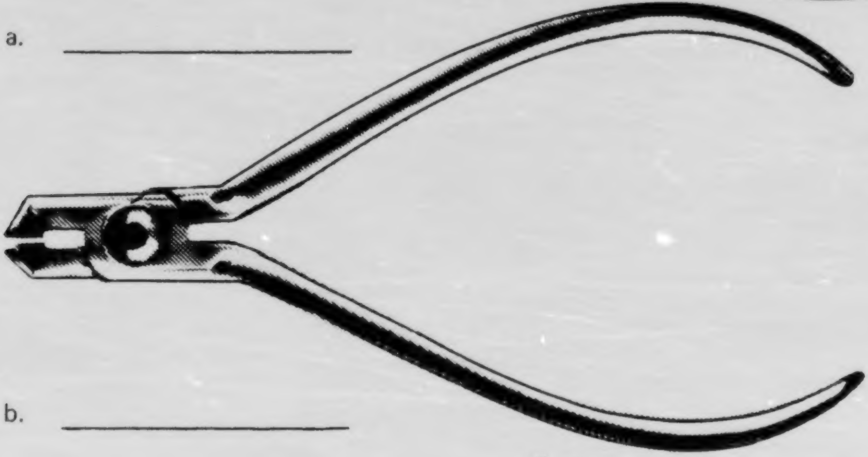
Band removing plier

Tweed arch bending plier

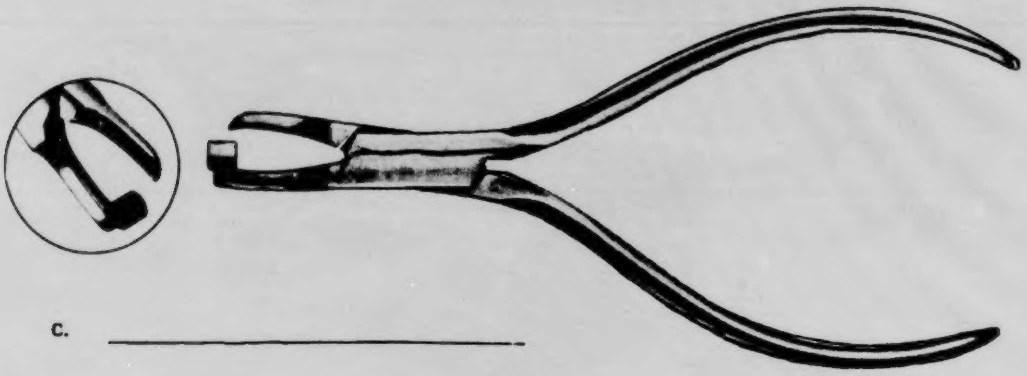
Ortho scissors #12S



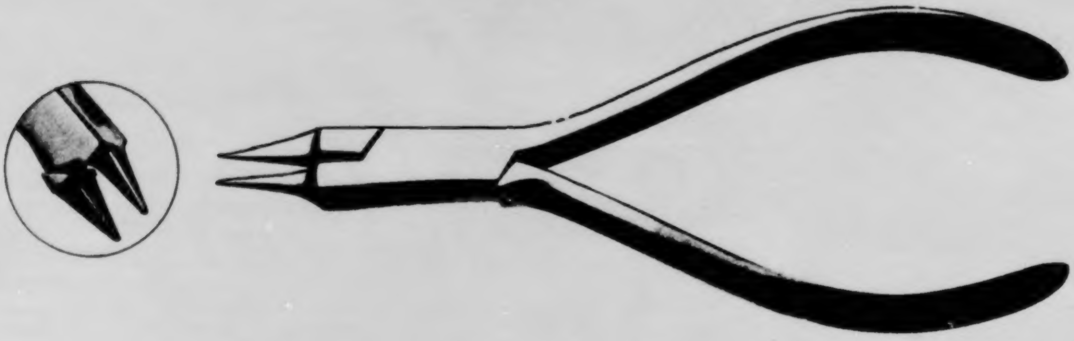
a. ______________________



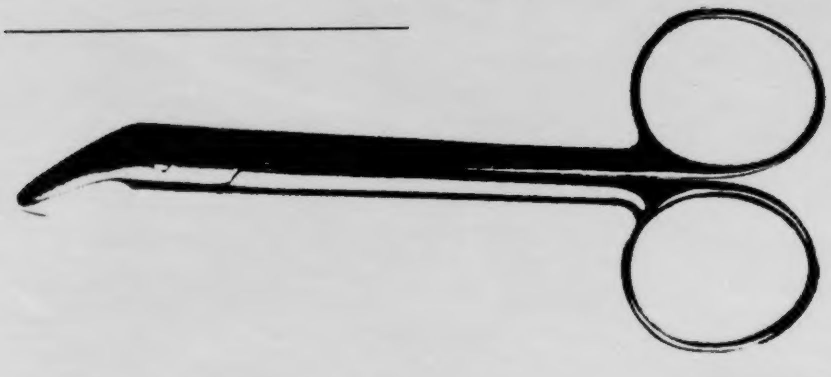
b. ______________________



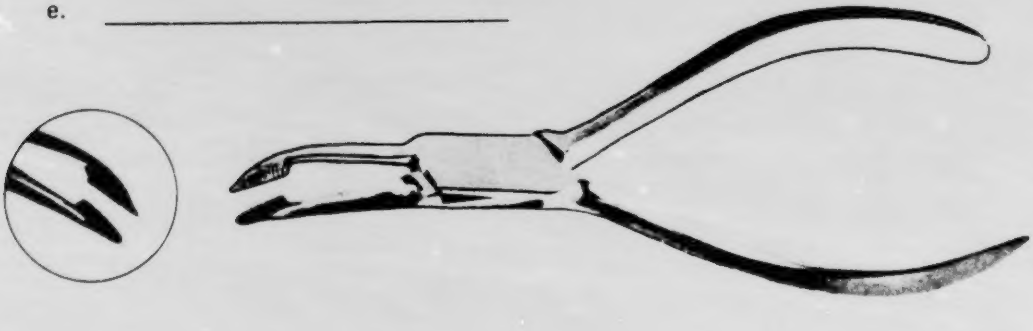
c. ______________________________



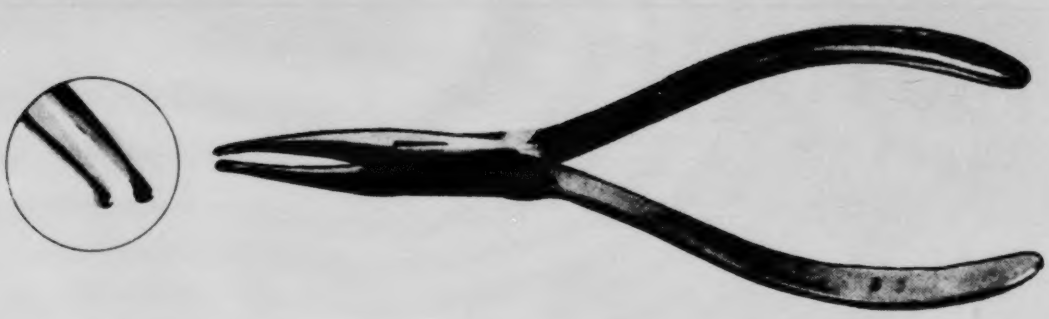
d. ______________________________



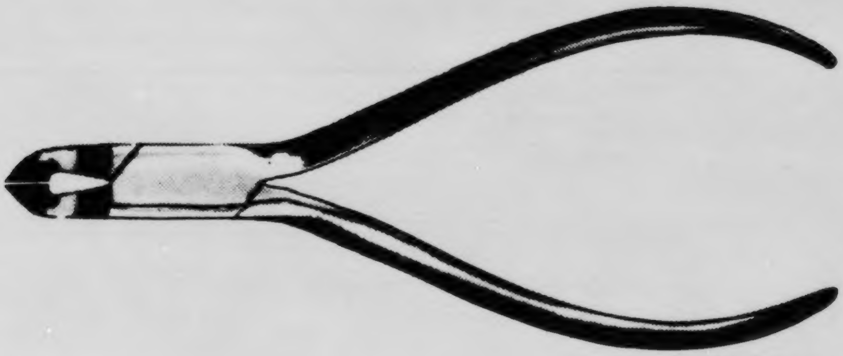
e. ______________________________



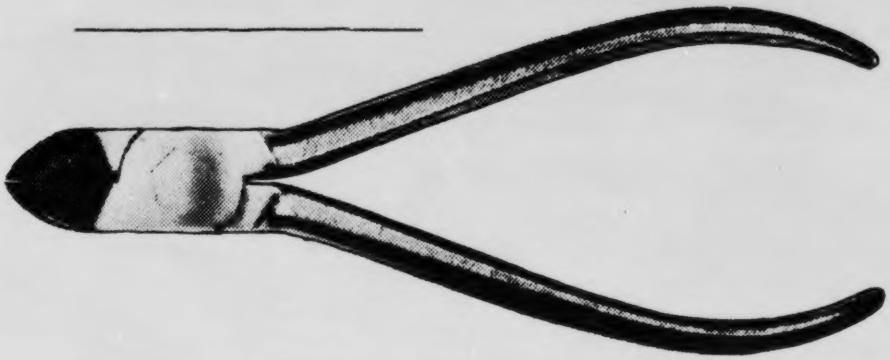
f. ______________________________



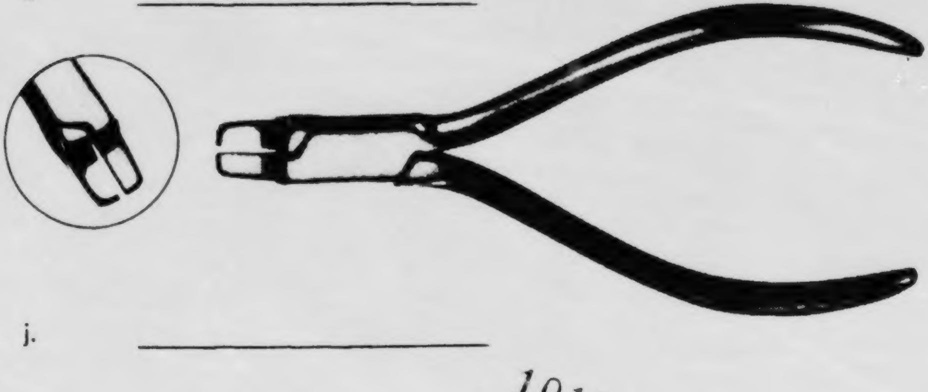
g. ______________________________



h. ______________________________



i. ______________________________



j. ______________________________

9. Match common orthodontic instruments to their uses. Write the correct numbers in the blanks provided.

______a. Used for bending wires

______b. Used to cut end of archwire after it is placed and tied in

______c. Used to put more strength in rectangular archwires

______d. Used to remove archwires

______e. Used to cut ligatures or take out archwires

______f. Used to remove bands

______g. Used as an all-purpose wire cutter

______h. Used mainly for placing and removing archwires on anterior teeth

______i. Used for cutting ligature wires

______j. Used on retainers and to adjust headgear

1. Weingart utility plier
2. Loop-forming plier
3. Straight How plier
4. Wire cutter
5. Distal end cutter
6. Pin and ligature cutting plier
7. Wire bending plier
8. Band removing plier
9. Tweed arch bending plier
10. Ortho scissors #12S

10. Distinguish between removable and fixed appliances. Write an "R" to indicate removable appliances and an "F" to indicate fixed appliances.

______a. Made of clamp attachments to hold appliance in place while applying force to teeth

______b. Appliance with several bands or directly bonded brackets attached to teeth

11. Match basic parts of appliances to their correct uses. Write the correct numbers in the blanks provided.

______a. Attachments welded on bands, or bonded directly onto teeth

______b. Fine wire that ties main archwire into each bracket

______c. Attached to main archwires to elicit gentle spring forces to individual teeth

______d. Fit into brackets on teeth and are ligated into them

1. Bands
2. Archwires
3. Brackets
4. Buccal tubes
5. Finger springs
6. Coil springs

______e. Rubber bands made especially for orthodontics

______f. Thin bands of metal that surround teeth and are cemented in place

______g. Attachments on molar bands; means by which ends of labial arch are secured to molar teeth

______h. Soft wire that is tied around contact points of nearby teeth

______i. Usually placed on an archwire and are compressed between teeth

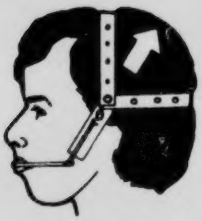
7. Ligature wire

8. Separation wire

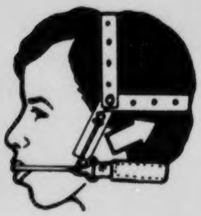
9. Elastics

12. Identify types of headgear. Write the correct names in the blanks provided.

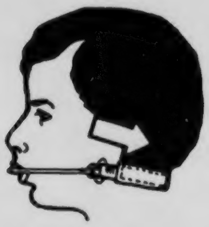
Combination Regular High pull



a. ____________________



b. ______________________



c. ____________________

13. Prepare a prescription extraction slip.

14. Demonstrate the ability to:

  a. Instruct orthodontic patient in oral health care.

  b. Prepare tray setup for band cementation.

  c. Prepare tray setup for tying in archwires.

  (NOTE: If activities 12 and 13 have not been finished before the test, ask your instructor when they should be completed.)

ORTHODONTICS
UNIT VII

ANSWERS TO TEST

1. a. 16
   b. 5
   c. 3
   d. 12
   e. 7
   f. 1
   g. 8
   h. 11
   i. 14
   j. 6
   k. 10
   l. 2
   m. 13
   n. 4
   o. 15
   p. 9
2. a. Establish a normal functional occlusion
   b. Improve facial appearance
   c. Aid in keeping teeth
3. a, b, c, f, h, k
4. c, d, e, f, h, i
5. a. 7
   b. 5
   c. 2
   d. 8
   e. 6
   f. 4
   g. 1
   h. 3
6. a. Class I
   b. Class II
   c. Class III
7. a. Cementation
   b. Direct bond
8. a. Wire bending plier
   b. Distal end cutter
   c. Band removing plier
   d. Loop-forming plier

e. Ortho scissors #12S

f. Weingart utility plier

g. Straight How plier

h. Pin and ligature cutting plier

i. Wire cutter

j. Tweed arch bending plier

9. a. 2 f. 8

b. 5 g. 4

c. 9 h. 3

d. 1 i. 10

e. 6 j. 7

10. a. R

b. F

11. a. 3 f. 1

b. 7 g. 4

c. 5 h. 8

d. 2 i. 6

e. 9

12. a. High pull

b. Combination

c. Regular

13. Evaluated to satisfaction of instructor

14. Performance skills evaluated to satisfaction of instructor

ORAL SURGERY
UNIT VIII

UNIT OBJECTIVE

After completion of this unit, the student should be able to assist in oral surgery using sterile techniques and instruct patient in post-operative care. This knowledge will be evidenced by completion of assignment sheet, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with oral surgery to the correct definitions.
2. Select from a list indications for extractions.
3. Select from a list duties of dental assistant during oral surgery.
4. Match types of commonly used general anesthetic agents.
5. Describe common complications and actions taken in oral surgery.
6. Identify instruments commonly used in oral surgery.
7. Identify types of mandibular forceps.
8. Identify types of maxillary forceps.
9. Identify types of accessory instruments.
10. Label basic surgical instruments.
11. Match instruments used in oral surgery to their uses.
12. Select from a list instruments used to prepare a typical oral surgery tray.
13. Describe symptoms and treatment of a dry socket.
14. Describe care of the mouth after surgery.
15. Instruct patient in post-operative care.
16. Demonstrate the ability to:
    a. Wash hands using surgical procedure.
    b. Use surgical supplies.
    c. Put on sterile gloves.

d. Prepare suture for use.

e. Prepare typical oral surgery instrument tray.

f. Assist with single extraction.

g. Assist with multiple extractions and alveolectomy.

h. Assist with simple biopsy.

ORAL SURGERY
UNIT VIII

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Order film.

   B. Make transparency.

   C. Provide students with objective sheet.

   D. Provide students with information, assignment and job sheets.

   E. Discuss unit and specific objectives.

   F. Discuss information and assignment sheets.

   G. Discuss and demonstrate procedures outlined in job sheets.

   H. Have students role play job sheets.

   I. Demonstrate how a tooth is removed.

   J. Reinforce sterile techniques.

   K. Invite an oral surgeon to speak with class.

      Example: Duties expected of dental assistant during surgery

   L. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency Master 1--Surgical Instrument Exchange

   D. Assignment Sheet #1–Instruct Patient in Post-Operative Care

   E. Job sheets

      1. Job Sheet #1--Wash Hands Using Surgical Procedure

      2. Job Sheet #2--Use Surgical Supplies

      3. Job Sheet #3–Put on Sterile Gloves

4. Job Sheet #4--Prepare Suture for Use

5. Job Sheet #5--Prepare Typical Oral Surgery Instrument Tray

6. Job Sheet #6--Assist with Single Extraction

7. Job Sheet #7--Assist with Multiple Extractions and Alveolectomy

8. Job Sheet #8--Assist with Simple Biopsy

F. Test

G. Answers to test

III. Unit references:

A. Ehrlich, Ann. *Introduction to the Auxiliary's Role in Oral Surgery*. Champaign: Colwell Systems, Inc., 1974.

B. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W. B. Saunders Co., 1976.

C. Baker, Benjamin R., and Strickland, William D. *Dental Assisting. Course V: Clinical Sciences.* 3rd ed. Chapel Hill: University of North Carolina, 1980.

IV. Films:

A. "Aseptic Technique in Oral Surgery." Videotape, color, 26 minutes, 1972. Available from University of Michigan, School of Dentistry, 1011 No. University, Ann Arbor, MI 48104.

B. "Oral Cancer Detection." Videotape, cassette, or slides, color, 8 1/2 minutes, 1973. Available from Virginia Commonwealth University, School of Dentistry, Dental Science Center, Box 637, Richmond, VA 23219.

ORAL SURGERY
UNIT VIII

INFORMATION SHEET

I. Terms and definitions

   A. Oral surgery--Area of dentistry dealing with removal of teeth and other surgical procedures

   B. Extraction--Removal of teeth

   (NOTE: There is no such thing as "pulling a tooth." Teeth are removed or extracted by applying forceps and moving them in a rocking motion.)

   C. Single extraction--Removal of single tooth

   D. Multiple extraction--Removal of several teeth

   E. Malpositioned tooth--Erupted but not positioned in proper place in dental arch

   F. Impacted--Unable to erupt in normal occlusion

   G. Supernumerary--Extra teeth that have formed; more teeth than normal

   H. Bony impaction--Tooth blocked by a bone and unable to erupt

   I. Retained root--Root remaining in alveolar process

   (NOTE: The root may be visible or may be found only by X-ray.)

   J. Gingival reduction--Surgical process of removing excess bone in marginal ridge

   K. Biopsy--Microscopic examination of tissue or cells

   L. Alveolectomy--Surgical reshaping of alveolar ridge

   M. Apicoectomy--Surgical removal of root tip

   N. Premedication--Taken prior to surgery to aid patient to relax or reduce anxiety

   (NOTE: The patient may be asked not to eat or drink anything prior to surgery or premedication.)

   O. Aspirating--Withdrawing or removing by suction

   P. Universal--Instruments used interchangeably for right or left, or maxillary or mandibular

INFORMATION SHEET

Q. Non-vital--Pulp of tooth is dead

R. Dry socket--Painful condition where blood clot has failed to form after oral surgery

S. Pericoronitis--Inflammation of the gingiva around a newly-formed tooth

II. Indications for extractions

A. Teeth diseased beyond repair

B. Orthodontic purposes

Example: Spacing

C. Supernumerary or impacted teeth

D. Soft tissue tumors and abnormalities

E. Lack of sufficient bone support for teeth

F. Non-vital tooth

(NOTE: Non-vital is when root canal therapy is not indicated or may be unsuccessful.)

III. Duties of dental assistant during oral surgery

A. Record patient's medical and dental health history

(NOTE: This has usually been recorded before the surgery appointment, but may have to be done just before surgery in an emergency.)

B. Position patient in dental chair (operating table)

C. Drape patient

D. Provide for patient's comfort

E. Take temperature and blood pressure if indicated

F. Record temperature and blood pressure on chart

G. Remain with patient at all times

(NOTE: The assistant stays with patient after anesthesia is given and until the patient is dismissed.)

H. Observe patient closely

I. Alert dentist if patient shows signs of distress

Examples: Fainting, change of skin color, difficulty in respiration

J. Record all surgical procedures, medications, and instructions

INFORMATION SHEET

IV. Types of commonly used general anesthetic agents

(NOTE: There are other types of general anesthetic agents used in dental offices and hospitals, but these are the most favored for dental surgical procedures.)

A. Nitrous oxide--Inhalation-type agent used for brief surgical procedure

B. Thiopental (Pentothal)--Short-acting barbiturate given intravenously

C. Halothane (Fluothane)--Inhalation-type with rapid recovery for patient

V. Common complications and actions taken in oral surgery

A. Complications--Respiratory failure and vasomotor collapse

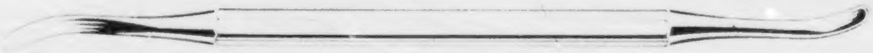
B. Actions taken--Cease anesthesia and provide emergency care immediately

(NOTE: This type of an emergency requires well trained auxiliary personnel to aid the doctor with the patient suffering from respiratory failure.)

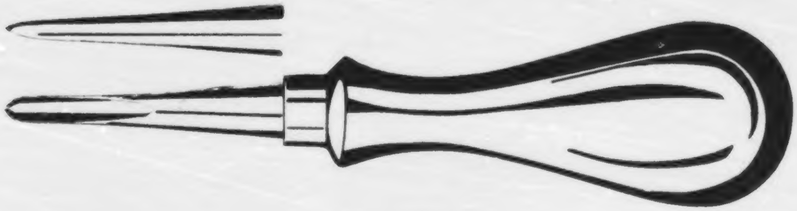
(CAUTION: Have emergency kit in readiness, assist in mouth to mouth resuscitation and cardiopulmonary resuscitation if indicated.)

VI. Instruments commonly used in oral surgery

A. Periosteal elevator

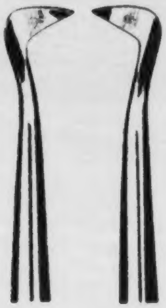


B. Straight elevator (upper and lower anterior roots)

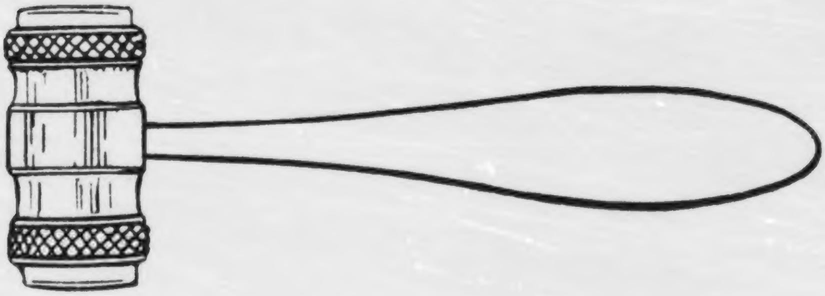


INFORMATION SHEET

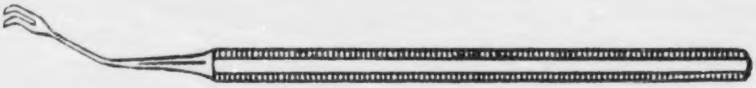
C. Angular elevator (maxillary and mandibular right and left roots)



D. Surgical mallet

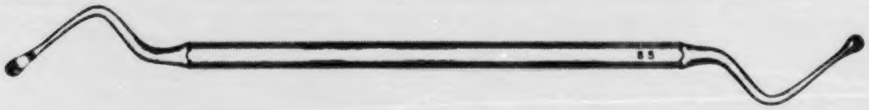


E. Retractor (tissue)

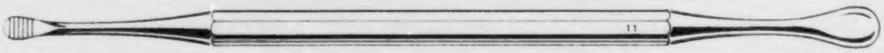


INFORMATION SHEET

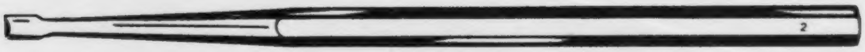
F. Double-ended surgical curette



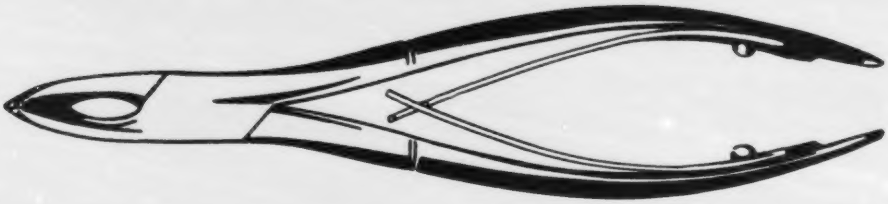
G. Bone file



H. Bone chisel



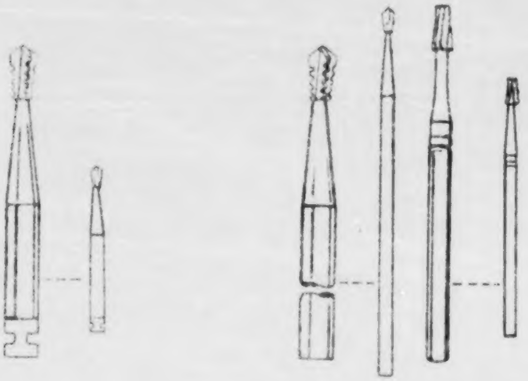
I. Rongeur



INFORMATION SHEET

J. Surgical burs

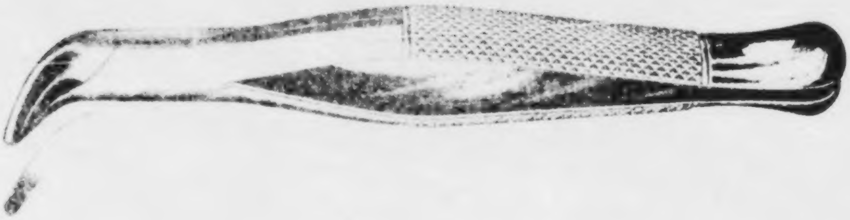
(NOTE: Surgical burs are similar in shape to burs designed for tooth preparations, but usually have an elongated shank to provide accessibility.)



VII. Types of mandibular forceps

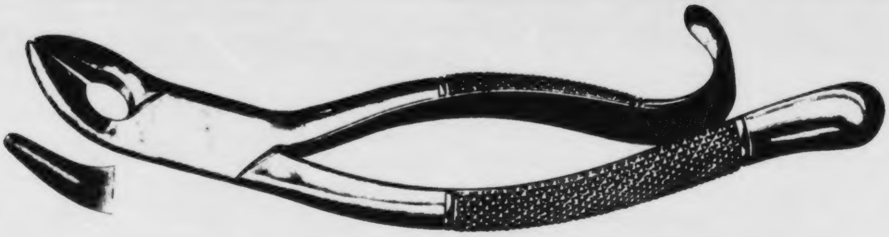
(NOTE: The instruments discussed in this unit are general types; each dentist will have his or her preference.)

A. Universal central, lateral, bicuspid, and root forcep

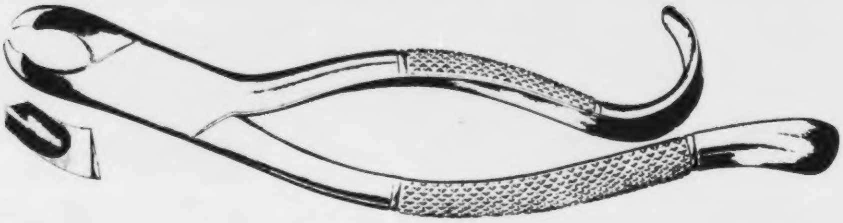


INFORMATION SHEET

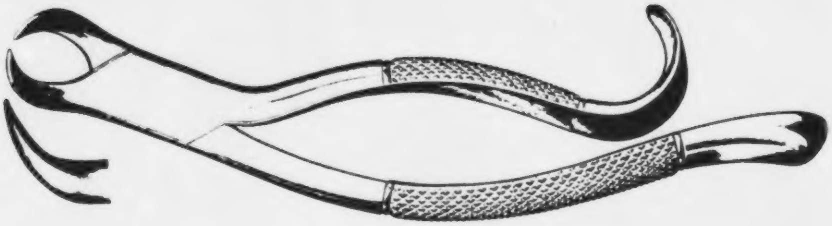
B. Universal cuspid and bicuspid forcep



C. Universal first and second molar forcep

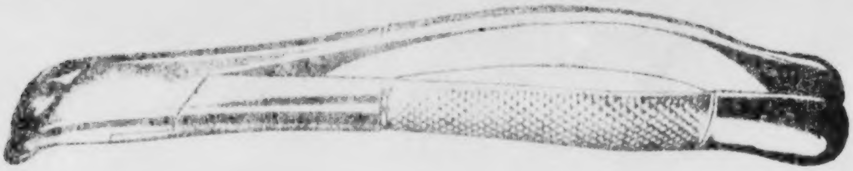


D. Universal first and second molar forcep (Cowhorn)



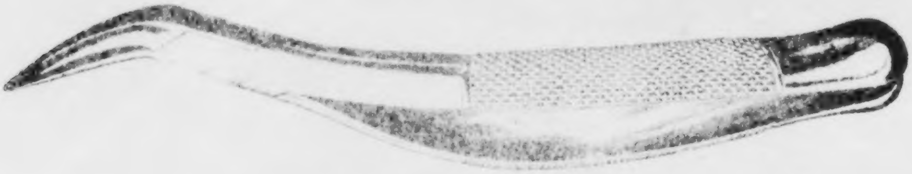
INFORMATION SHEET

E. Universal first and second bicuspid and molar forcep

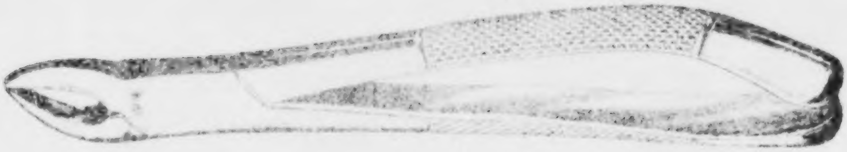


VIII. Types of maxillary forceps

A. Root and incisor forcep (mandibular and maxillary)

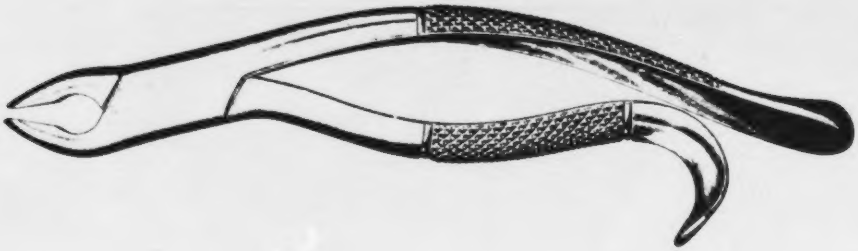


B. Universal incisor, bicuspid, and root forcep (maxillary)

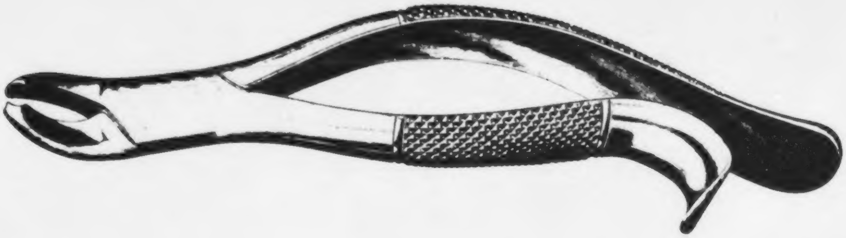


INFORMATION SHEET

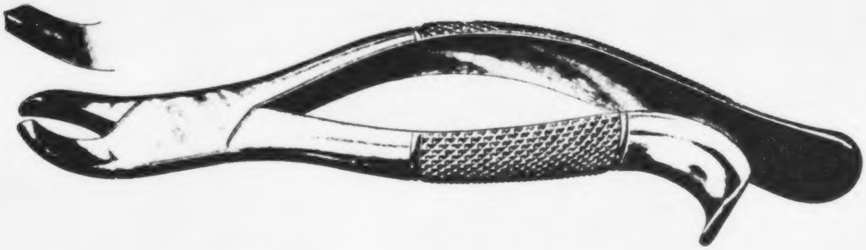
C. Incisor, cuspid, and bicuspid forcep (maxillary)



D. First and second molar forcep (right)



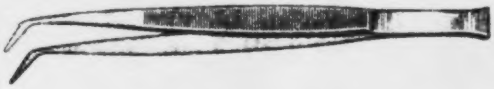
E. First and second molar forcep (left)



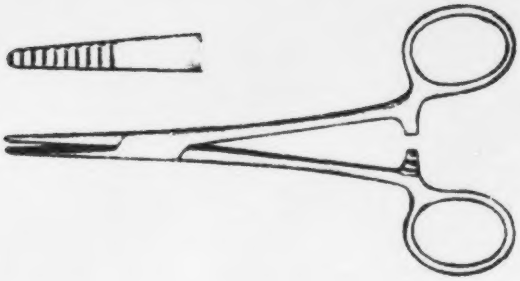
INFORMATION SHEET

IX. Types of accessory instruments

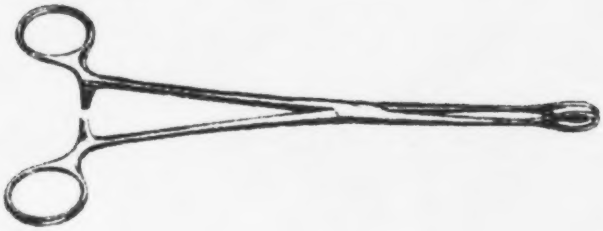
A. Dressing forceps



B. Hemostat

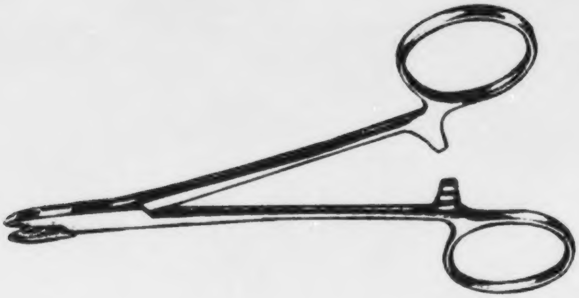


C. Sponge forceps

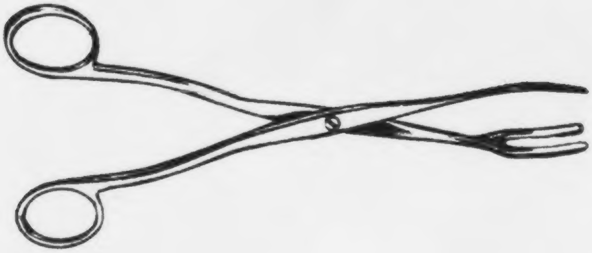


INFORMATION SHEET

D. Needle holders

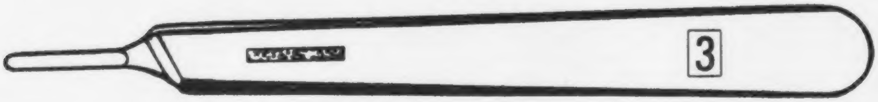


E. Instrument forceps



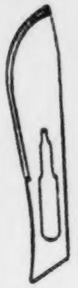
X. Basic surgical instruments

A. #3 surgical blade holder



INFORMATION SHEET

B. Surgical blades



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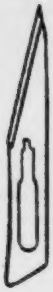

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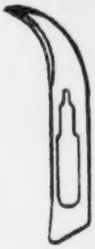

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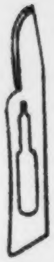
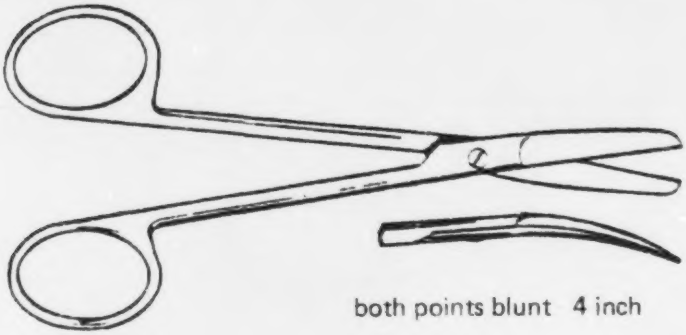


#15

C. Surgical scissors

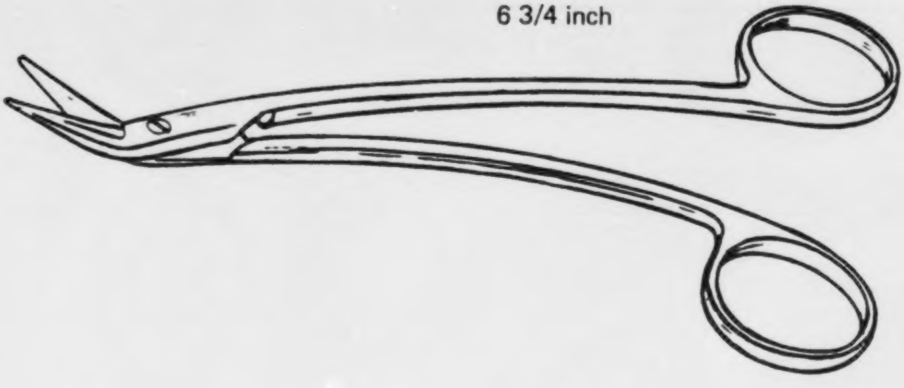
1. Curved



both points blunt 4 inch

INFORMATION SHEET

2. Angular


6 3/4 inch

XI. Instruments used in oral surgery and their uses (Transparency 1)

A. Periosteal elevator--Used to detach periosteum (bony covering) and gingival tissue around neck of tooth

B. Elevator--Loosens and removes roots

(NOTE: Elevators are designed for different teeth, operating techniques, locations and conditions in the mouth. Elevators can be classified according to their shape or form for ease of choice.)

Examples: Straight, crossbar, angular

C. Surgical mallet--Used with chisel for breaking bone

D. Retractor--Holds cheek and tongue

E. Double-ended surgical curette--Removes debris and diseased tissue from sockets and alveolar bone

(NOTE: These come in three basic sizes - small, medium, large.)

F. Bone file (rasp)--Used in final trimming or smoothing of bony ridge

G. Bone chisel--Removes bone or split teeth

H. Rongeur--Cuts and contours bone

I. Surgical forcep--Used to remove teeth

J. Surgical burs--Cut, split or remove bone

(NOTE: Surgical burs must be sterilized before use. The shanks are designed for straight or contra-angle.)

INFORMATION SHEET

XII. Instruments used to prepare a typical oral surgery tray

- A. Probe
- B. Mirror
- C. Cotton pliers
- D. Periosteal elevator
- E. Straight elevator
- F. Curettes (right and left)
- G. Rongeur forceps
- H. Needle holder
- I. Straight and curved hemostats
- J. Scissors
- K. Bone file
- L. Prepared syringe
- M. Emesis basin
- N. Suction tip
- O. Blade handle

(NOTE: Sometimes minor procedures become major procedures in surgery. The accessory items are sterilized and ready as needed.)

Examples: Knife blades, sutures

XIII. Symptoms and treatment of dry socket

- A. Symptoms
  1. Throbbing pain
  2. Headache
  3. Foul odor
- B. Treatment
  1. Apply topical anesthesia
  2. Cleanse with saline solution

INFORMATION SHEET

3. Use cotton pledgets to dry socket

4. Pack socket with medicated gauze

(NOTE: The cause of a dry socket is unknown; the most that can be done is to keep the area clean, provide pain relief, and allow the body to heal itself.)

XIV. Care of mouth after surgery (Assignment Sheet #1)

A. Rinsing--Rinse mouth every three or four hours with saline solution (1/4 teaspoon of salt to a glass of water); start rinsing mouth the day after surgery and continue for several days

(CAUTION: Do not rinse mouth the day of surgery. Rinsing may damage the blood clot which forms after surgery.)

B. Bleeding--Place gauze pads over bleeding area and bite down firmly for one-half hour

(NOTE: Some bleeding is to be expected following an extraction or surgery. Repeat instructions above if necessary.)

C. Swelling--Apply ice pack to swollen area for 30 minutes; repeat off and on for about three hours

(NOTE: If you do not have an ice pack, roll chipped ice in a towel.)

D. Pain--Use any aspirin-type medication or use prescription if needed

E. Food--Eat lightly for 24 hours

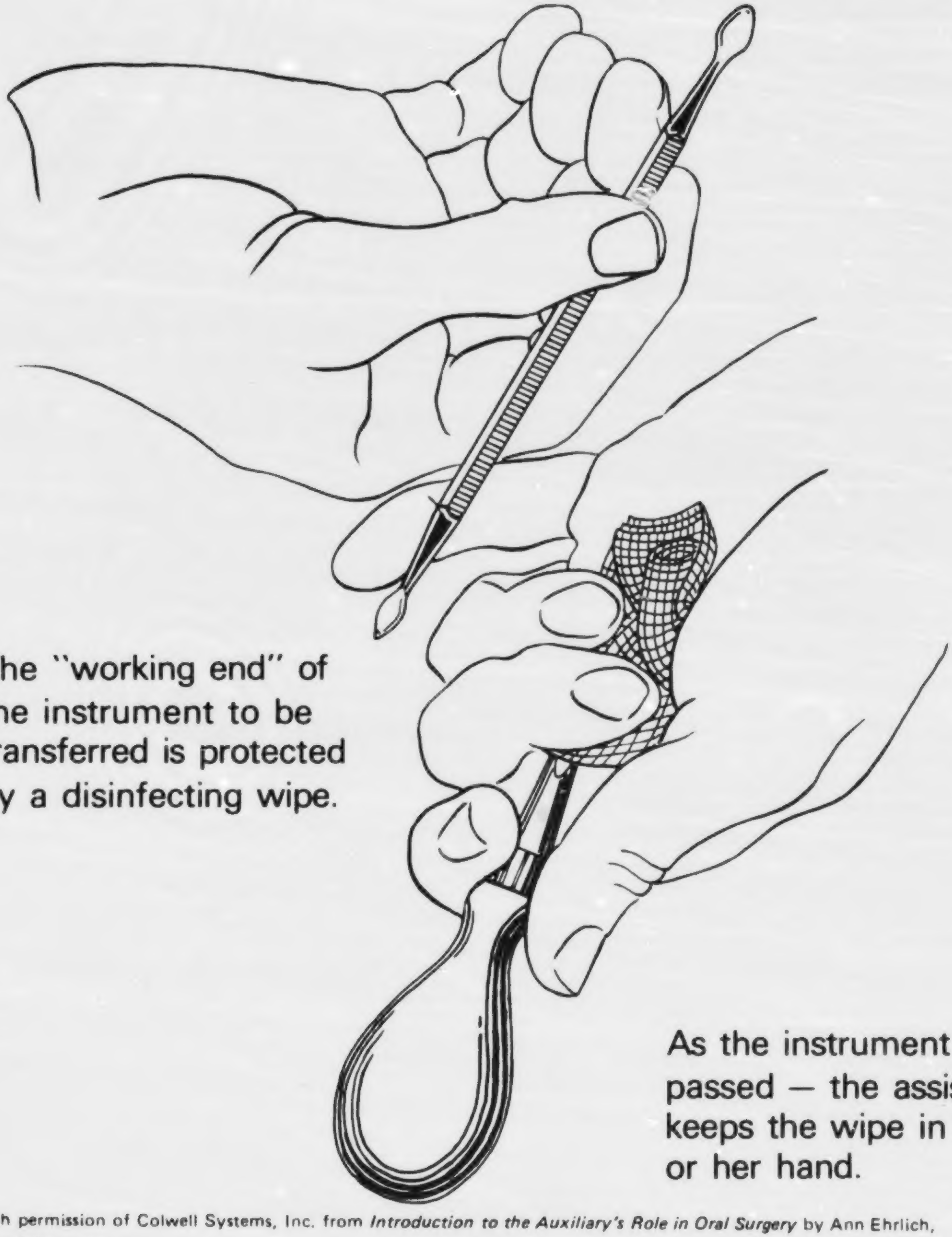
Example: Soups

F. Unusual symptoms--Call doctor's office immediately

Examples: Headache, extreme discomfort in surgical area

(NOTE: It is useful to advise patients that bone fragments may work up through the gums during healing. This is a normal process and patient may need to return to the office for removal.)

Surgical Instrument Exchange



The "working end" of the instrument to be transferred is protected by a disinfecting wipe.

As the instrument is passed — the assistant keeps the wipe in his or her hand.

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ORAL SURGERY
UNIT VIII

ASSIGNMENT SHEET #1--INSTRUCT PATIENT IN POST-OPERATIVE CARE

NAME ______________________ SCORE ____________

Proper care following any type of oral surgery will hasten recovery and prevent complications. Your patient will be under stress and may ask many questions, so be prepared to answer them. React to the following situations orally or in writing.

1. "If I have pain, do I have to take the prescription the dentist gave me, or may I take something else?"

2. "I don't have an ice bag. Could I use a heating pad instead?"

3. "I don't remember what you said about bleeding. Would you repeat that part of the instructions, please?"

4. "I recall you saying to put gauze in my mouth, but what did you say to do with it?"

ORAL SURGERY
UNIT VIII

JOB SHEET #1--WASH HANDS USING SURGICAL PROCEDURE

I. Equipment

- A. Scrub brushes
- B. Nail file or orange stick
- C. Recommended antibacterial soap
- D. Scrub sink
- E. Towel
- F. Mechanical hand dryer, if used
- G. Sink with knee controls

II. Procedure

- A. Prepare for scrubbing
  1. Wear freshly laundered gown or scrub suit
  2. Roll sleeves to 3" above elbow
  3. Wear scrub cap or turban; cover all hair completely
  4. Clean fingernails
- B. Scrub hands using antibacterial cleanser
  1. Wet hands and forearms
  2. Spread a few drops of cleanser over hands and arms
  3. Rub hands and arms a few times and add more water to give more suds
  4. Clean under the nails with orange stick
  5. Wet hands and forearms and re-apply cleanser
  6. Pick up scrub brush from sterile container

JOB SHEET #1

7. Wet brush and use cleanser on brush

8. Add small amount of water to brush to produce suds

9. If right handed, hold brush in right hand and scrub left hand

10. Using circular brush motion, scrub all four sides of the fingers, remainder of hand, and forearm (Figures 1 and 2)

FIGURE 1

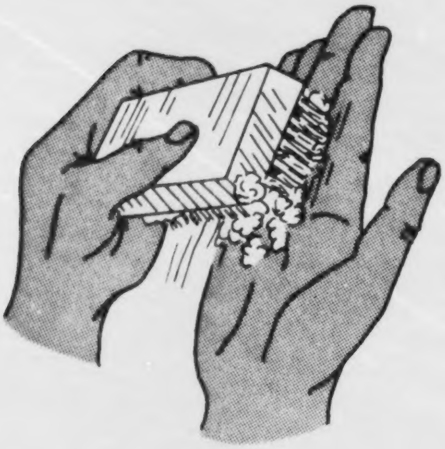
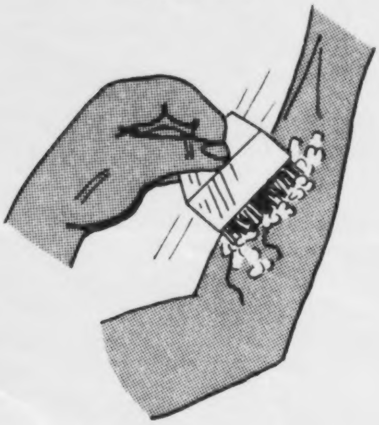


FIGURE 2



11. After scrubbing, hold hands higher than elbows to prevent contaminated water from running down

12. Change brush to second hand and repeat procedure for other hand

13. Continue scrubbing one hand, arm, and then next for 3-5 minutes in emergency or 7-10 minutes in nonemergency situations

14. Rinse hands, arms and brush well under running water

15. Keep hands higher than elbows in front of self

JOB SHEET #1

C. Dry hands with sterile towel (Figure 3)

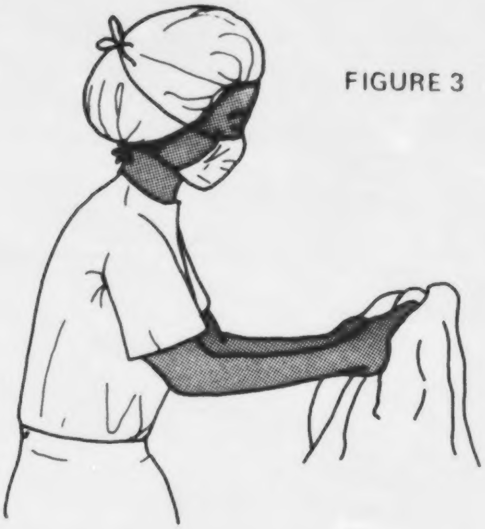


FIGURE 3

1. Place upper end of towel in one hand and dry fingers of other hand, then the arm of same side

2. Transfer lower end of towel to dry hand and dry fingers, hand, and arm of second hand

   (NOTE: Care must be taken not to touch the towel against uniform or scrub gown while drying.)

3. Drop towel in designated container or place

4. Hold both hands higher than elbows

D. Short scrub technique

1. Wash hands and arms well

2. Clean nails with file or orange stick; use plenty of running water

3. With brush scrub one hand and arm and then the other using the following brush count: hands--20 strokes to nails; 10 strokes to fingers and surfaces of hands; arms--6 strokes to below elbows

4. Rinse hands and arms; turn off faucet with towel

ORAL SURGERY
UNIT VIII

JOB SHEET #2--USE SURGICAL SUPPLIES

I. Equipment

A. Transfer forceps

(NOTE: Transfer forceps may also be called handling forceps, lifting forceps, or pick-up forceps.)

B. Forceps container with disinfectant

C. Containers of sterile supplies

1. Sterile towels and/or tray covers
2. 4 x 4s or 2 x 2s
3. Cotton balls
4. Applicators or swabs
5. Instruments

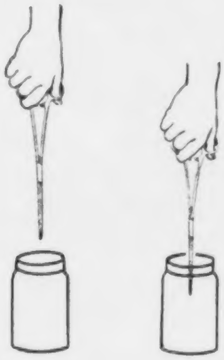
II. Procedure for using transfer forceps

A. Wash hands

B. Remove transfer forceps from container

1. Withdraw forceps vertically, taking care not to touch the sides of the container
2. Hold the forceps with the tip down to prevent the disinfectant from running back and forth over both sterile and unsterile portions of the forceps (Figure 1)

FIGURE 1



JOB SHEET #2

C. Return forceps to container

1. Take care not to touch outside or rim of container

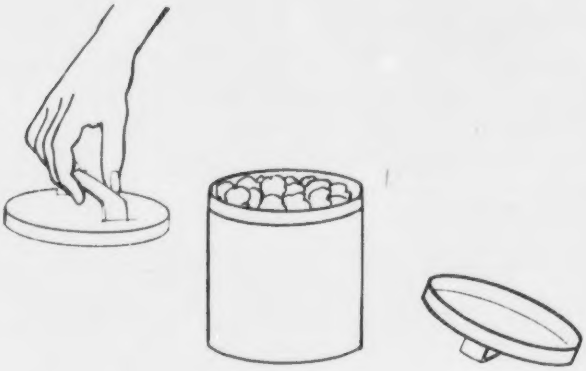
2. Make sure tips are together whenever forceps are lifted from or returned to container

III. Procedure for removing the cover from a container of sterile supplies

A. If cover is held, hold the cover with the inner surface down (Figure 2)

B. If cover is laid down, place outer surface down to prevent contamination of the inside (Figure 2)

FIGURE 2



IV. Procedure for preparing a sterile field on a tray or table

A. Lift cover from container of towels

B. Remove one towel with transfer forceps

C. Replace cover

D. Transfer towel to free hand

E. Replace transfer forceps

F. Open towel, touching only the side which will touch the tray or table surface

G. Lay towel on tray or table

JOB SHEET #2

V. Procedure for handling 4 x 4s or 2 x 2s, cotton balls, applicators

A. Lift cover from container

B. Remove desired number of articles with transfer forceps (Figures 3 and 4)

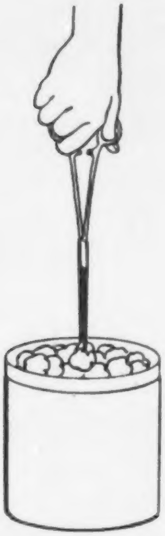


FIGURE 3

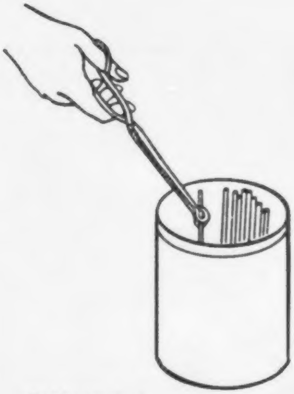


FIGURE 4

C. Place articles along one side of the sterile surface

D. Place along the other side one or more 4 x 4s or 2 x 2s on which to lay the instrument

(NOTE: In some cases a sterile basin is placed on the tray to receive the instruments from the disinfectant solution.)

E. Replace cover on container

VI. Procedure for opening a large pack

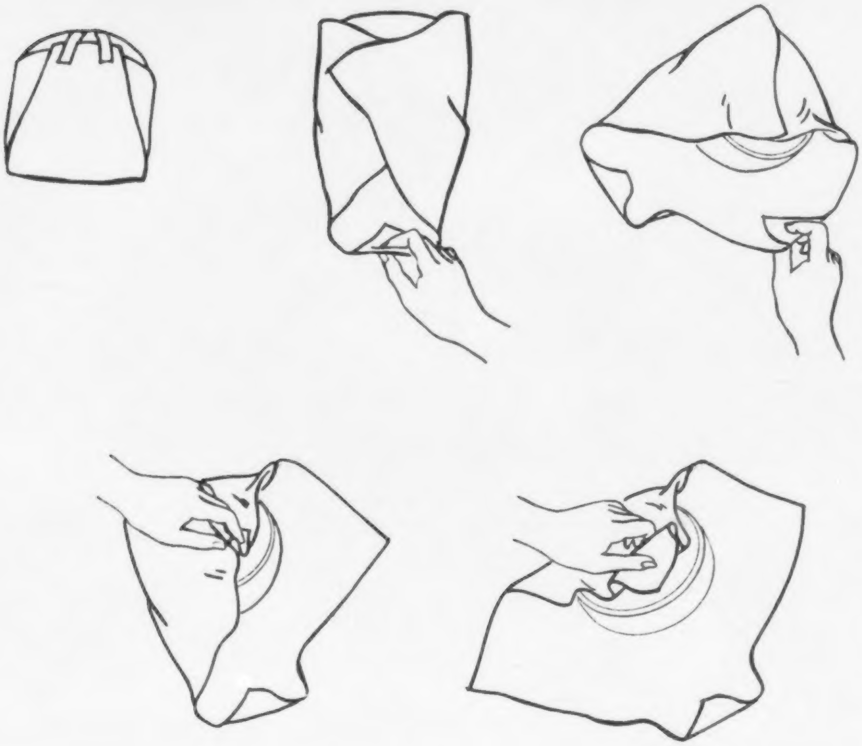
A. Place large packs to be opened on table

B. Loosen the fasteners

JOB SHEET #2

C. Fold back one flap at a time, grasping the wrapper from the outside so that fingers never touch the inside (Figure 5)

FIGURE 5



D. Use the articles from the pack as needed or transfer to a sterile tray with transfer forceps or sterile gloves

VII. Procedure for opening a small pack

A. Loosen the fasteners

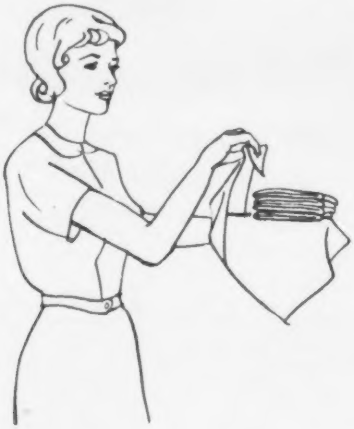
B. Hold the pack in one hand

C. Open the flaps one at a time with the other hand

JOB SHEET #2

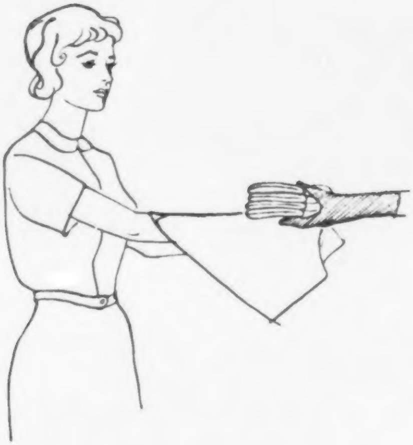
D. Hold the pack so that the last flap opened is toward you (Figure 6)

FIGURE 6



E. Hand article to someone wearing gloves or transfer with transfer forceps (Figure 7)

FIGURE 7



VIII. Procedure for adding solutions to a tray

A. Place container on tray for receiving the solution using transfer forceps

B. Remove cap from container of solution

C. Pour solution gently without splashing it

(NOTE: Remember that liquid on the sterile field makes the field unsterile.)

D. Replace cap on solution container

JOB SHEET #2

IX. Procedure for care of a prepared tray

(NOTE: Trays should not be prepared too long before use due to the danger of contamination.)

A. Cover the tray with another sterile towel, being careful not to touch the underside of the towel which will touch the tray

B. Leave covered tray until needed or take to the patient's unit for use

(NOTE: Many health care facilities use commercially prepared setups. These materials should be used according to the manufacturer's recommendations.)

ORAL SURGERY
UNIT VIII

JOB SHEET #3--PUT ON STERILE GLOVES

I. Equipment

   A. Package of sterile gloves

   B. Soap

   C. Brush

   D. Paper towels

II. Procedure

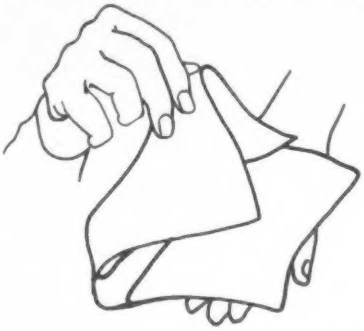
   A. Wash hands

      1. Scrub hands for two minutes using brush, soap, and water as needed

      2. Rinse and dry hands

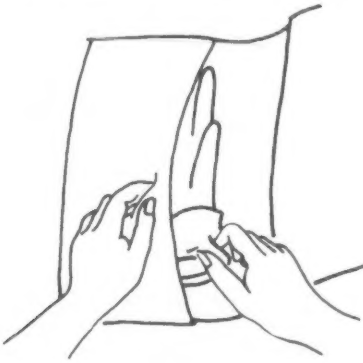
   B. Open glove wrapper, touching only the outside (Figure 1)

FIGURE 1



   C. Remove one glove from wrapper by grasping the cuff on the fold (Figure 2)

FIGURE 2

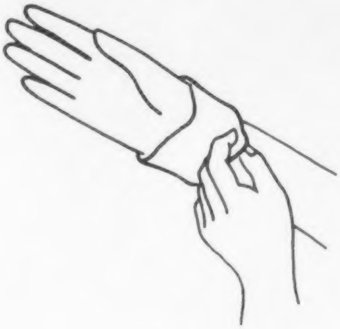


JOB SHEET #3

D. Put glove on by pulling on the folded edge of the cuff (Figure 3)

(NOTE: Do not touch the outside of the glove with the fingers of the ungloved hand.)

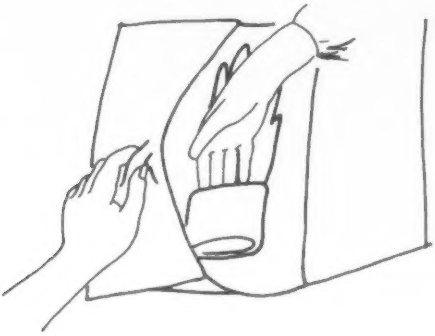
FIGURE 3



E. Remove second glove from wrapper by slipping the gloved fingers inside the folded cuff (Figure 4)

(NOTE: Do not touch the gloved hand to the outside of the wrapper, which is unsterile.)

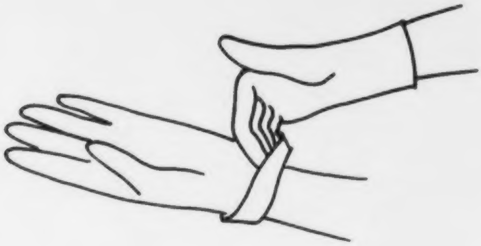
FIGURE 4



JOB SHEET #3

F. Pull second glove on, taking care not to touch the outside of the gloved fingers to the ungloved hand (Figure 5)

FIGURE 5



G. Adjust the fingers as necessary

ORAL SURGERY
UNIT VIII

JOB SHEET #4--PREPARE SUTURE FOR USE

I. Equipment

  A. Packet of prethreaded disposable needles

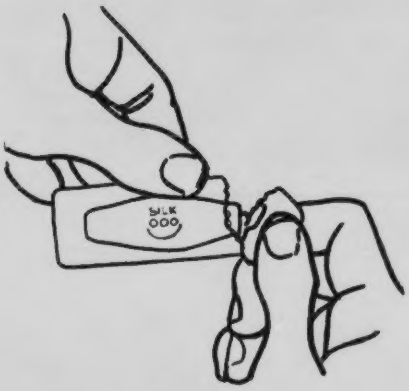
  B. Hemostat

II. Procedure for opening packet

  A. Hold packet in left hand and tear open at end (Figure 1)

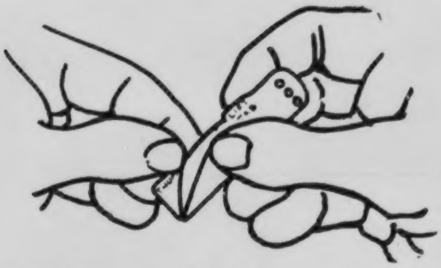
  (NOTE: Suture packages are opened just before use.)

FIGURE 1



  B. Lift tab (Figure 2)

FIGURE 2



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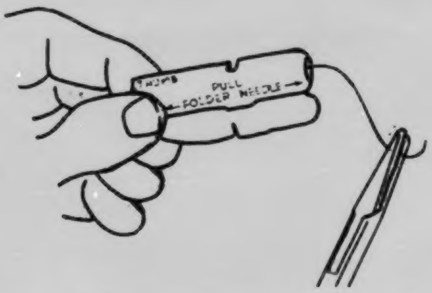
JOB SHEET #4

C. Hold packet with left hand, and pull out sterile needle with hemostat (Figure 3)

FIGURE 3



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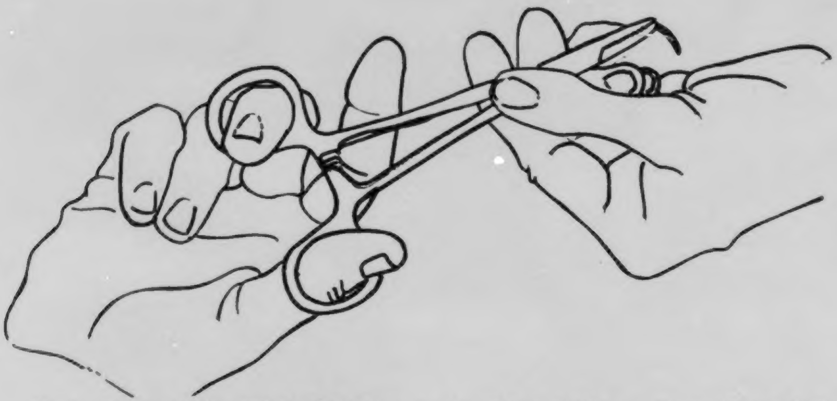
III. Procedure for placement

A. Lock needle in hemostat and pass to doctor (Figure 4)

FIGURE 4



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B. Retract patient's cheek and tongue

(NOTE: This will provide the dentist with a clear view of the area.)

C. Cut sutures after doctor has completed stitch, leaving 2 to 3 mm of thread beyond the knot

D. Receive hemostat, and place both hemostat and scissors on tray

ORAL SURGERY
UNIT VIII

JOB SHEET #5--PREPARE TYPICAL ORAL SURGERY INSTRUMENT TRAY

I. Equipment

A. Probe

B. Mirror

C. Cotton pliers

D. Periosteal elevator

E. Straight elevator

F. Curette (right and left)

G. Rongeur forcep

H. Needle holder

I. Scissors

J. Bone file

K. Prepared syringe

L. Emesis basin (optional)

M. Suction tip

N. Knife handle and blade

O. Gauze, 2 x 2

II. Procedure

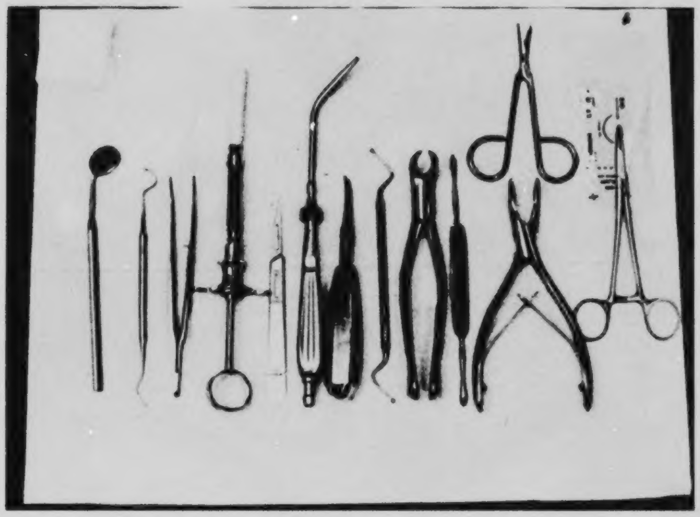
A. Select tray

B. Gather instruments

C. Place on tray (Figure 1)

(NOTE: Ask instructor to check tray.)

FIGURE 1



ORAL SURGERY
UNIT VIII

JOB SHEET #6--ASSIST WITH SINGLE EXTRACTION

I. Equipment

A. Prepared surgical tray

B. Chain and towel (drape)

C. 2 x 2 and 4 x 4 gauze

II. Procedure

(NOTE: The assistant should review patient's chart and history before any operative procedure.)

A. Seat patient

B. Instruct patient

C. Adjust chair

D. Drape patient

E. Adjust light to area of work

F. Place radiographs on viewbox

G. Place prepared tray on stand or area of dentist's choice

H. Assist in administration of anesthetic

I. Hand dentist periosteal elevator of choice

(NOTE: Under certain conditions the doctor may ask for a scalpel.)

J. Retract patient's cheek and lips

K. Place aspirator tip adjacent to operative site

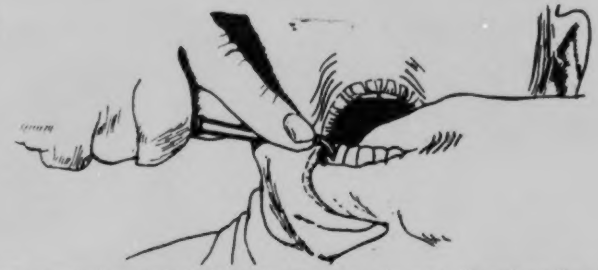
L. Continue aspirating as dentist removes soft tissue around tooth

JOB SHEET #6

M. Observe doctor removing tooth (Figure 1)

(NOTE: If the dentist is working in the mandibular arch, use a mirror to depress the tongue.)

FIGURE 1



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N. Pass mirror with left hand to inspect socket

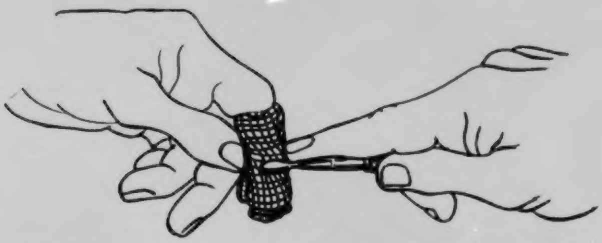
O. Suction socket free of hemorrhage

P. Pass small curette for the dentist to use in socket inspection

Q. Hold gauze sponge for dentist to remove debris from instrument (Figure 2)

Examples: Bone chips, blood clots

FIGURE 2



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R. Maintain suction to keep field clear of hemorrhage

(NOTE: If contouring of the bone is required, the dentist will need further assistance.)

S. Pass ronguers

T. Hold gauze sponge for dentist to remove bone shavings from beak

U. Maintain adequate suction of site

JOB SHEET #6

V. Receive ronguers with left hand and pass bone file with right hand if indicated

W. Hold gauze sponge near patient's mouth so dentist can clean file

X. Use damp gauze sponge to wipe patient's mouth

Y. Instruct patient in post-operative care

Z. Dismiss patient

ORAL SURGERY
UNIT VIII

JOB SHEET #7--ASSIST WITH MULTIPLE EXTRACTIONS AND ALVEOLECTOMY

I. Equipment

  A. Prepared surgical tray

  B. Nitrous oxide accessories

  C. Aromatic spirits of ammonia

  D. Extra cartridges of anesthesia

II. Procedure

  A. Seat and drape patient

  B. Instruct patient

  Example: Calm assurance

  C. Scrub hands

  D. Assist doctor with nitrous oxide (N_2O) if used

  E. Adjust light for area of work

  F. Assist with block and infiltration injection

  G. Retract cheek (right or left)

  (NOTE: Retract cheek and tongue if working in mandibular area.)

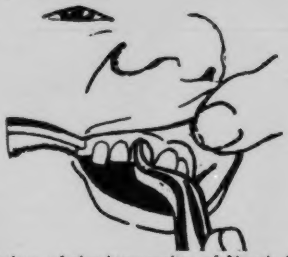
  H. Pass periosteal elevator for doctor to loosen gingiva

  I. Provide suction in area of work

  J. Receive elevator

  K. Hand forceps (Figure 1)

FIGURE 1



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JOB SHEET #7

L. Continue suction with right hand and hold cup with left hand to receive teeth

M. Exchange forceps when indicated

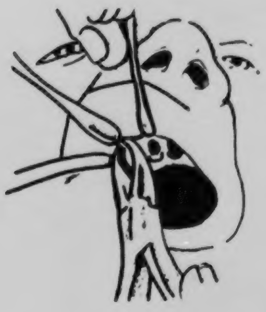
(NOTE: It is the responsibility of the dental assistant to anticipate the doctor's needs.)

Example: Moving from bicuspid to molar area requires exchange of bicuspid forceps to molar forceps

N. Receive forceps

O. Pass rongeur for dentist to trim alveolar bone (Figure 2)

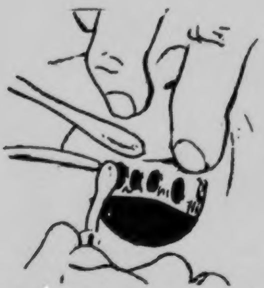
FIGURE 2



(NOTE: After each cut have disinfected gauze ready to clean rongeur beaks.)

P. Receive rongeur and pass bone file (Figure 3)

FIGURE 3



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Q. Continue suction as doctor finishes bone trimming

R. Hold disinfected gauze ready to clean file

S. Receive bone file and hand doctor tissue scissors

JOB SHEET #7

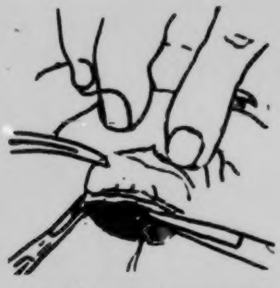
T. Continue suction and hold gauze to receive tissue

U. Receive tissue scissors

V. Pass prepared suture needle in holder

W. Cut sutures as directed (Figure 4)

FIGURE 4



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X. Use gauze to clean patient's face

Y. Instruct patient in post-operative care

Z. Dismiss patient

ORAL SURGERY
UNIT VIII

JOB SHEET #8--ASSIST WITH SIMPLE BIOPSY

(NOTE: Due to extent of types of cystic formations and various surgical procedures, this unit will introduce only a simple biopsy technique. If further study is needed in this area, it is suggested that the student use an oral surgery textbook.)

I. Equipment

  A. Scalpel and blade (choice)

  B. Needle and suture

  C. Prepared anesthetic syringe

  D. Topical anesthetic and swab

  E. Tissue forceps

  F. Scissors

  G. Container with formalin

II. Procedure

  A. Seat patient

  B. Drape patient

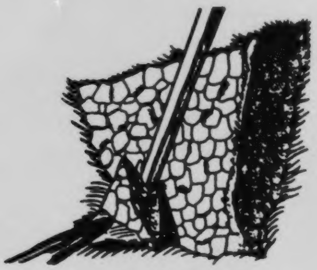
  C. Instruct patient

  D. Assist in administration of anesthesia

  E. Hand dentist scalpel and tissue forceps

  F. Use suction while dentist makes incision (Figure 1)

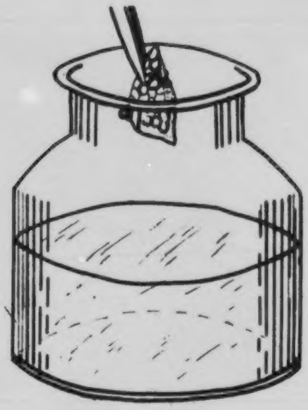
FIGURE 1



JOB SHEET #8

G. Hold container for placement of tissue (Figure 2)

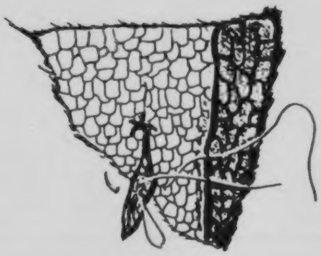
FIGURE 2



H. Pass gauze to doctor to apply pressure for bleeding

I. Pass hemostat forceps with needle for suturing (Figure 3)

FIGURE 3



J. Continue using suction to clear field

K. Cut sutures as indicated

L. Give patient 2 x 2 gauze to take home

M. Instruct patient in post-operative care

N. Dismiss patient

ORAL SURGERY
UNIT VIII

TEST

NAME______________________________ SCORE______________

1. Match terms associated with oral surgery to the correct definitions. Place the correct numbers in the blanks provided. Terms continue on the next page.

_____a. Withdrawing or removing by suction

_____b. Erupted but not positioned in proper place in dental arch

_____c. Removal of single tooth

_____d. Microscopic examination of tissue or cells

_____e. Surgical removal of root tip

_____f. Removal of teeth

_____g. Extra teeth that have formed; more teeth than normal

_____h. Instruments used interchangeably for right or left, or maxillary or mandibular

_____i. Area of dentistry dealing with removal of teeth and other surgical procedures

_____j. Tooth blocked by bone and unable to erupt

_____k. Unable to erupt in normal occlusion

_____l. Removal of several teeth

_____m. Surgical reshaping of alveolar ridge

_____n. Taken prior to surgery to aid patient to relax or reduce anxiety

_____o. Root remaining in alveolar process

_____p. Inflammation of the gingiva around a newly-formed tooth

_____q. Surgical process of removing excess bone in marginal ridge

1. Oral surgery
2. Extraction
3. Multiple extraction
4. Single extraction
5. Malpositioned tooth
6. Impacted
7. Supernumerary
8. Bony impaction
9. Retained root
10. Gingival reduction
11. Biopsy
12. Alveolectomy
13. Apicoectomy
14. Premedication
15. Aspirating
16. Universal
17. Non-vital
18. Pericoronitis
19. Dry socket

______r. Pulp of tooth is dead

______s. Painful condition where blood clot has failed to form after oral surgery

2. Select from the list below indications for extractions. Place an "X" in the correct blanks.

______a. Fractured cusp

______b. Non-vital tooth

______c. Discolored teeth

______d. Lack of sufficient bone support for teeth

______e. Supernumerary or impacted teeth

______f. Teeth diseased beyond repair

______g. Infected sinus

______h. Orthodontic purposes

______i. Teeth affected by terramycin

______j. Soft tissue tumors and abnormalities

3. Select from the list below duties of the dental assistant during oral surgery. Mark each correct answer with an "X."

______a. Drape patient

______b. Record all surgical procedures, medications, and instructions

______c. Record patient's medical and dental health history

______d. Place matrix band

______e. Position patient in dental chair (operating table)

______f. Instruct patient to lessen fear

______g. Alert dentist if patient shows signs of distress

______h. Provide for patient's comfort

______i. Take temperature and blood pressure if indicated

______j. Exchange instruments in front of patient's face

______k. Remain with patient at all times

______l. Record temperature and blood pressure on chart

______m. Observe patient closely

4. Match types of commonly used general anesthetic agents to the correct descriptions. Place the correct numbers in the blanks provided.

_____a. Short-acting barbiturate given intravenously

_____b. Inhalation-type with rapid recovery for patient

_____c. Inhalation-type agent used for brief surgical procedures

1. Nitrous oxide
2. Thiopental (Pentothal)
3. Halothane (Fluothane)

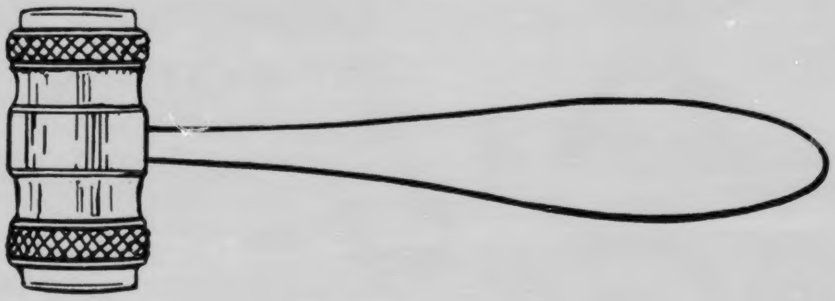
5. Describe common complications and actions taken in oral surgery.

a. Complications--____

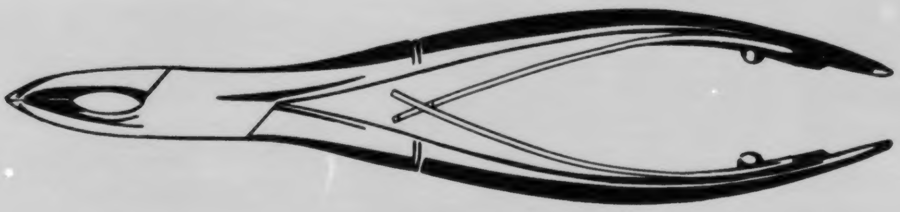
b. Actions taken--____

6. Identify instruments commonly used in oral surgery as shown on the following pages. Write the correct names in the blanks provided.

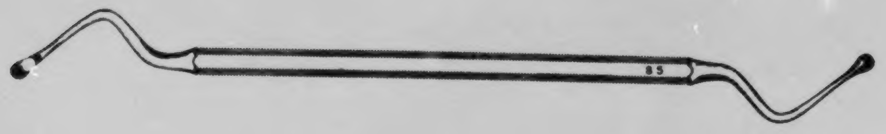
Surgical burs
Bone chisel
Surgical mallet
Straight elevator
Retractor
Rongeur
Bone file
Double-ended surgical curette
Periosteal elevator
Angular elevator



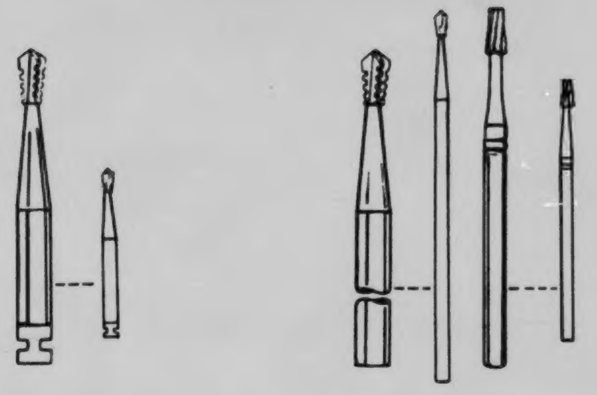
a. __________________________________



b. __________________________________



c. ______________________________



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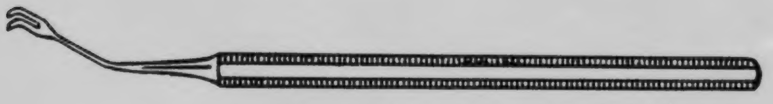
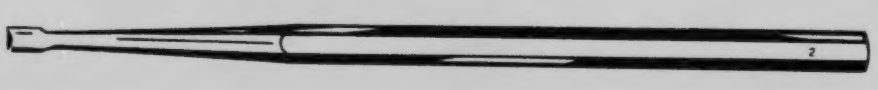
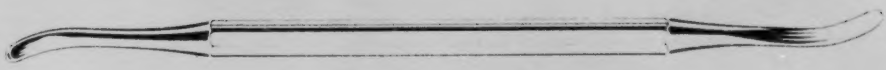


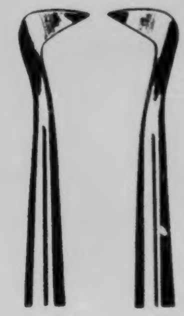
e. ______________________________



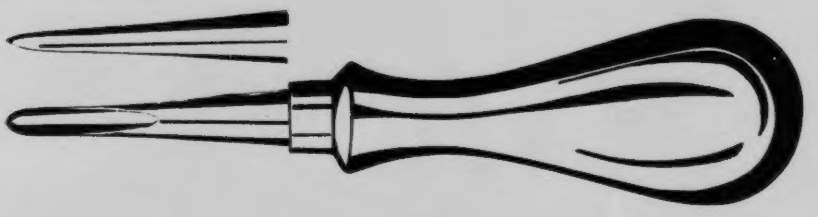
f. ______________________________



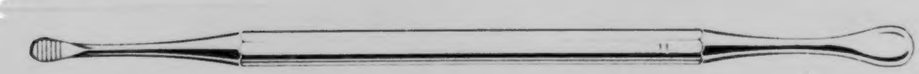
g. ________________________________



h. ________________________________



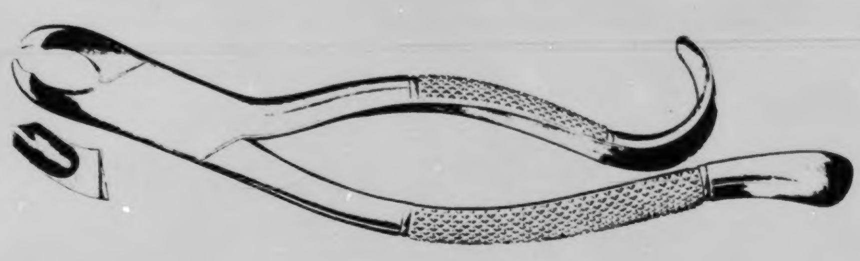
i. ________________________________



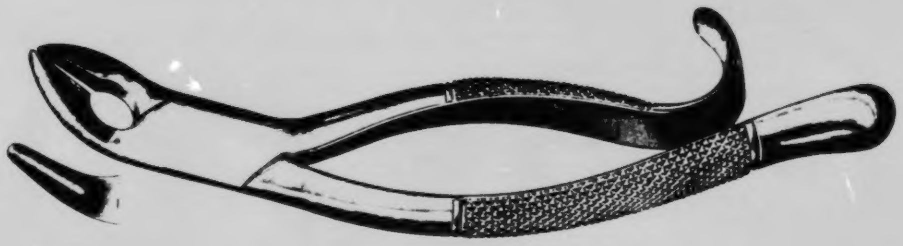
j. ________________________________

7. Identify types of mandibular forceps as shown below and on the next page. Write the correct names in the blanks provided.

Universal first and second molar forcep (Cowhorn)
Universal first and second molar forcep
Universal first and second bicuspid and molar forcep
Universal cuspid and bicuspid forcep
Universal central, lateral, bicuspid, and root forcep



a. ______________________________



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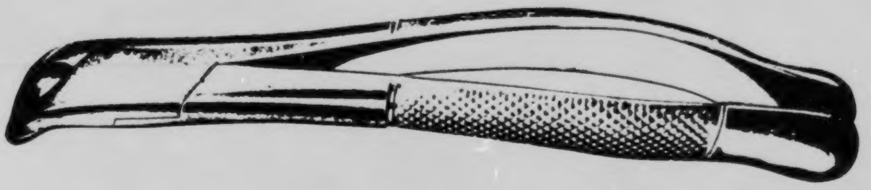

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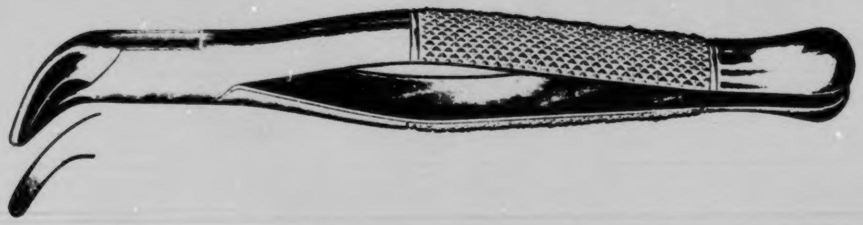

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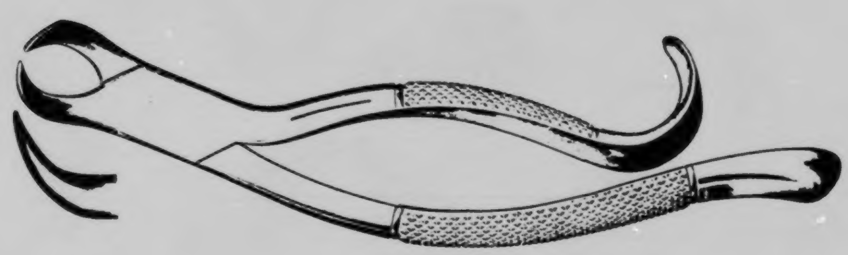
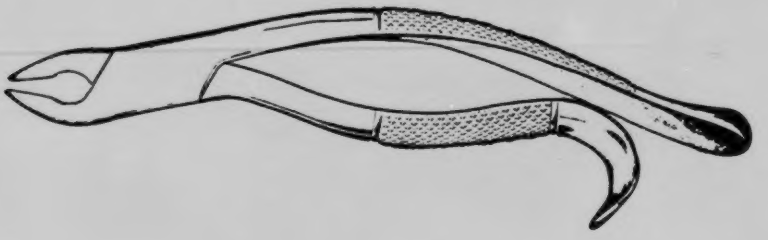


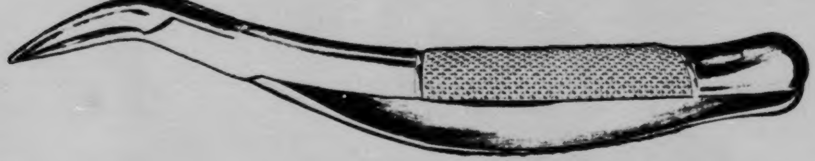
e. ______________________________

8. Identify types of maxillary forceps. Write the correct names in the blanks provided.

Root and incisor forcep (mandibular and maxillary)
First and second molar forcep (left)
Incisor, cuspid, and bicuspid forcep (maxillary)
Universal incisor, bicuspid, and root forcep (maxillary)
First and second molar forcep (right)



a. ______________________________



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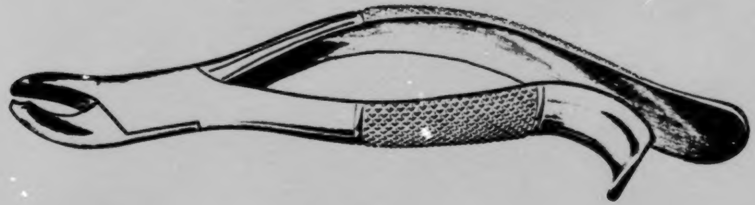

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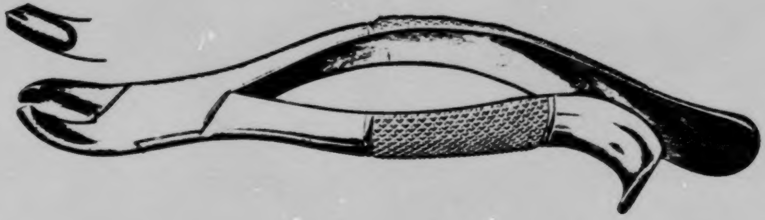

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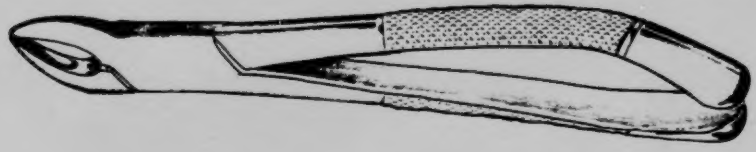
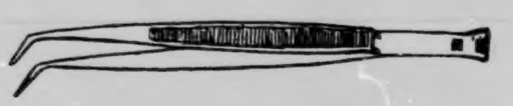


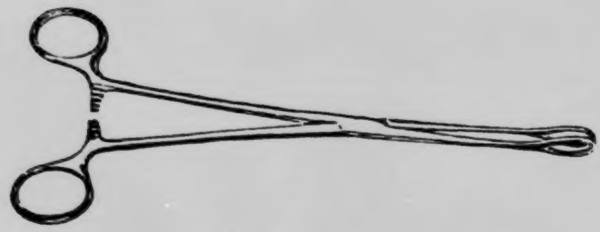
e. ______________________________

9. Identify types of accessory instruments. Write the correct names in the blanks provided.

Sponge forceps	Hemostat (needle holder)
Needle holders (hemostat)	Dressing forceps
Instrument forceps	



a. ______________________________



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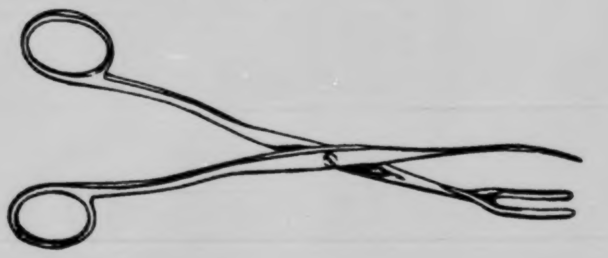

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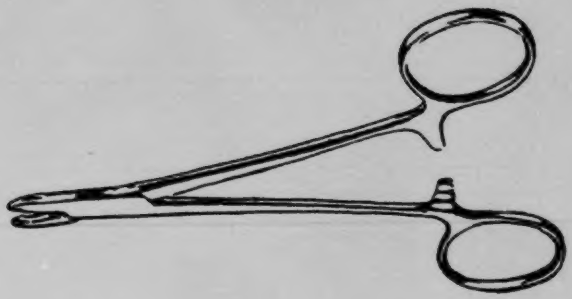

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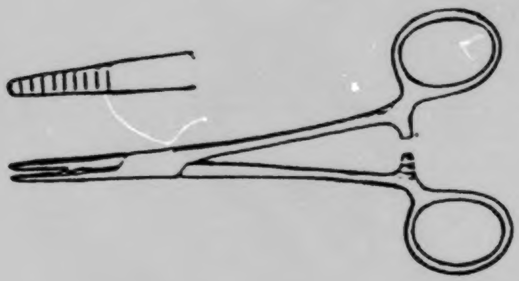
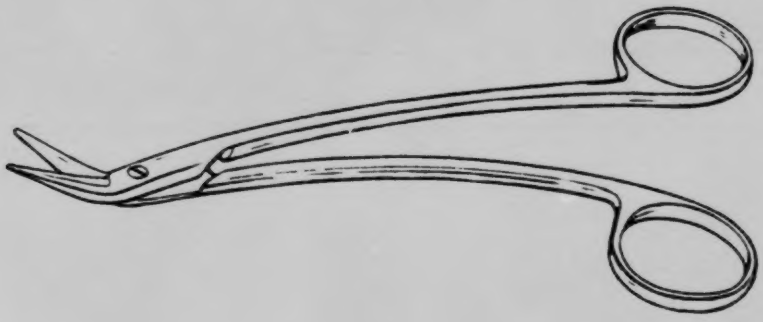
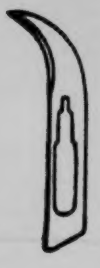


e. ______________________________

10. Label the basic surgical instruments shown in the drawings below and on the next page. Write the correct names in the blanks provided.



a. ______________________________



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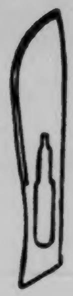

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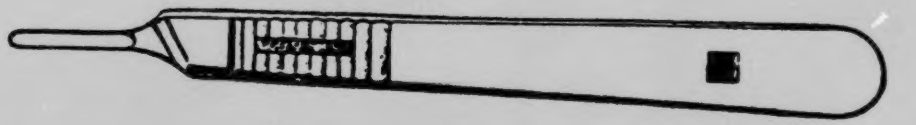

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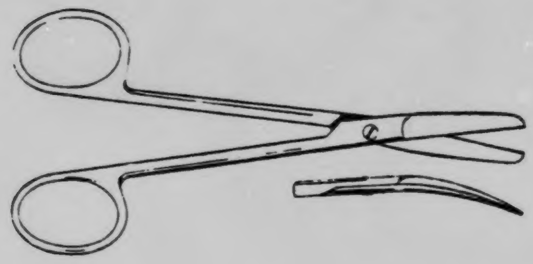
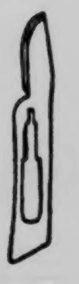
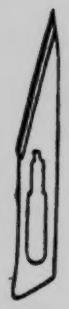


e. ____________________



f. ____________________



g. ____________________

11. Match instruments used in oral surgery to their correct uses. Place the correct numbers in the blanks provided.

______a. Holds cheek and tongue

______b. Cuts and contours bone

______c. Loosens and removes roots

______d. Used in final trimming or smoothing of bony ridge

______e. Used to detach periosteum (bony covering) and gingival tissue around neck of tooth

______f. Used to remove teeth

______g. Removes bone or split teeth

______h. Used with chisel for breaking bone

______i. Cut, split, or remove bone

______j. Removes debris and diseased tissue from sockets and alveolar bone

1. Periosteal elevator
2. Elevator
3. Surgical mallet
4. Retractor
5. Double-ended surgical curette
6. Bone file (rasp)
7. Bone chisel
8. Rongeur
9. Surgical forcep
10. Surgical burs

12. Select from the following list instruments used to prepare a typical oral surgery tray. Mark each correct answer with an "X."

______a. Impression tray

______b. Blade handle

______c. Scissors

______d. Straight elevator

______e. Prophy angle

______f. Cotton pliers

______g. Carver

______h. Emesis basin

______i. Needle holder

______j. Matrix retainer

______k. Curettes (right and left)

_____l. Probe

_____m. Wedge

_____n. Mirror

_____o. Periosteal elevator

_____p. Rongeur forceps

_____q. Plastic matrix

_____r. Straight and curved hemostats

_____s. Bite registration paste

_____t. Shade guide

_____u. Bone file

_____v. Prepared syringe

_____w. Scaler

_____x. #4 bur

13. Describe symptoms and treatment of a dry socket in the spaces below.

a. Symptoms

1) ____________________

2) ____________________

3) ____________________

b. Treatment

1) ____________________

2) ____________________

3) ____________________

14. Describe care of the mouth after surgery in the spaces below.

a. Rinsing--____________________

____

b. Bleeding--____________________

____

c. Swelling--____

____

d. Pain--____

____

e. Food--____

____

f. Unusual symptoms--_________________________________

____

15. Instruct patient in post-operative care.

16. Demonstrate the ability to:

    a. Wash hands using surgical procedure.

    b. Use surgical supplies.

    c. Put on sterile gloves.

    d. Prepare suture for use.

    e. Prepare typical oral surgery instrument tray.

    f. Assist with single extraction.

    g. Assist with multiple extractions and alveolectomy.

    h. Assist with simple biopsy.

    (NOTE: If activities 15 and 16 have not been finished before the test, ask your instructor when they should be completed.)

ORAL SURGERY
UNIT VIII

ANSWERS TO TEST

1. a. 15
   b. 5
   c. 4
   d. 11
   e. 13
   f. 2
   g. 7
   h. 16
   i. 1
   j. 8
   k. 6
   l. 3
   m. 12
   n. 14
   o. 9
   p. 18
   q. 10
   r. 17
   s. 19

2. b, d, e, f, h, j

3. a, b, c, e, g, h, i, k, l, m

4. a. 2
   b. 3
   c. 1

5. Description should include:
   a. Complications--Respiratory failure and vasomotor collapse
   b. Actions taken--Cease anesthesia and provide emergency care immediately

6. a. Surgical mallet
   b. Rongeur
   c. Double-ended surgical curette
   d. Surgical burs
   e. Retractor
   f. Bone chisel
   g. Periosteal elevator
   h. Angular elevator
   i. Straight elevator
   j. Bone file

7. a. Universal first and second molar forcep
   b. Universal cuspid and bicuspid forcep
   c. Universal first and second bicuspid and molar forcep
   d. Universal central, lateral, bicuspid, and root forcep
   e. Universal first and second molar forcep (Cowhorn)

8. a. Incisor, cuspid, and bicuspid forcep (maxillary)
   b. Root and incisor forcep (mandibular and maxillary)
   c. First and second molar forcep (right)
   d. First and second molar forcep (left)
   e. Universal incisor, bicuspid, and root forcep (maxillary)

9. a. Dressing forceps
   b. Sponge forceps
   c. Instrument forceps
   d. Needle holders
   e. Hemostat

10. a. Surgical scissors, angular
    b. #12 surgical blade
    c. #10 surgical blade
    d. #3 surgical blade holder
    e. Surgical scissors, curved
    f. #15 surgical blade
    g. #11 surgical blade

11. a. 4   f. 9
    b. 8   g. 7
    c. 2   h. 3
    d. 6   i. 10
    e. 1   j. 5

12. b, c, d, f, h, i, k, l, n, o, p, r, u, v

13. Description should include:

    a. Symptoms

        1) Throbbing pain

        2) Headache

        3) Foul odor

    b. Treatment

        1) Apply topical anesthesia

        2) Cleanse with saline solution

        3) Use cotton pledgets to dry socket

        4) Pack socket with medicated gauze

14. Description should include:

    a. Rinse mouth every three or four hours with saline solution (1/4 teaspoon of salt to a glass of water); start rinsing mouth the day after surgery and continue for several days

    b. Place gauze pads over bleeding area and bite down firmly for one-half hour

    c. Apply ice pack to swollen area for 30 minutes; repeat on and off for about three hours

    d. Use any aspirin-type medication or use prescription if needed

    e. Eat lightly for 24 hours

    f. Call doctor's office immediately

15. Evaluated to satisfaction of the instructor

16. Performance skills evaluated to satisfaction of instructor

PROSTHODONTICS
UNIT IX

UNIT OBJECTIVE

After completion of this unit, the student should be able to assist the dentist with crown, bridge, and denture preparation. This knowledge will be evidenced by completion of assignment sheet, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with prosthodontics to the correct definitions.
2. Select from a list purposes of prosthodontics.
3. Select from a list types of cements used for fixed prosthodontics.
4. Match types of dental waxes to their correct uses.
5. Distinguish between characteristics of classifications of stone.
6. Distinguish between methods of controlling setting times of stone.
7. Match basic types of impression materials to their correct uses.
8. Select from a list uses of resins in prosthetics.
9. Match burs to their correct uses in crowns and bridges.
10. Match types of crowns and bridges to their correct descriptions.
11. Distinguish between fixed and removable prosthetics.
12. Identify parts of a bridge.
13. Arrange in order preliminary steps in three-quarter crown preparation.
14. Label types of finish lines used for different common crown preparations.
15. Distinguish between methods used before restoring severely broken down teeth.
16. Select from a list instruments used in gold crown preparation.
17. Distinguish between types of dentures.
18. Arrange in order duties of the dental assistant in denture construction.

19. Write a laboratory prescription.

20. Demonstrate the ability to:

    a. Use evacuator for crown and bridge.

    b. Assist with gingival retraction for crown and bridge.

    c. Prepare a temporary crown

    d. Operate hydrocolloid unit.

    e. Take an acrylic resin impression.

    f. Take bite registration.

    g. Cement a bridge.

    h. Prepare a custom tray.

    i. Use the articulator.

PROSTHODONTICS
UNIT IX

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information, assignment, and job sheets.

   C. Make transparencies.

   D. Order film.

   E. Discuss unit and specific objectives.

   F. Provide student with equipment and materials for assignment and job sheets.

   G. Demonstrate and discuss assignment and job sheets.

   H. Invite a prosthodontist or laboratory technician to speak with class on common procedures performed in the dental office or laboratory.

   I. Lead a discussion on drugs used to displace gingival tissue.

   Examples: Astringents--zinc chloride, 1.0% solution; tannic acid, 1.0% solution
   Caustic--zinc chloride, 5.0% solution

   J. Discuss other methods of gingival displacement.

   Examples: Surgical knife, electric cautery

   K. Have students take hydrocolloid impressions of each other.

   (NOTE: This will assist with teaching the student more understanding and courtesy for patient.)

   L. Have patient pour up model using different kinds of stone.

   Examples: Class I, Class II, Class III

   M. Give pretest over terms and definitions before teaching other parts of unit.

   N. Use as many objects as possible in teaching terms.

   Examples: Show waxes, articulator, stones

   O. Test this unit in parts before giving complete test.

   P. Give test.

II. Instructional materials:

- A. Objective sheet
- B. Information sheet
- C. Transparency masters
  - 1. TM 1--Accessory Instruments for Crown and Bridge
  - 2. TM 2--Instruments Used for Impressions
- D. Assignment Sheet #1--Write a Laboratory Prescription
- E. Job sheets
  - 1. Job Sheet #1--Use Evacuator for Crown and Bridge
  - 2. Job Sheet #2--Assist with Gingival Retraction for Crown and Bridge
  - 3. Job Sheet #3--Prepare a Temporary Crown
  - 4. Job Sheet #4--Operate Hydrocolloid Unit
  - 5. Job Sheet #5--Take an Acrylic Resin Impression
  - 6. Job Sheet #6--Take Bite Registration
  - 7. Job Sheet #7--Cement a Bridge
  - 8. Job Sheet #8--Prepare a Custom Tray
  - 9. Job Sheet #9--Use the Articulator
- F. Test
- G. Answers to test

III. Unit references:

- A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W. B. Saunders Co., 1976.
- B. Strickland, William D., and Baker, Benjamin R. *Dental Assisting. Course VII: Clinical Application.* 3rd ed. Chapel Hill: University of North Carolina, 1980.
- C. Strickland, William D., and Baker, Benjamin R. *Dental Assisting. Course V: Clinical Sciences.* 3rd ed. Chapel Hill: University of North Carolina, 1980.
- D. Taylor, Duane F. *Dental Assisting. Course IV: Dental Materials and Technical Procedures.* 3rd ed. Chapel Hill: University of North Carolina, 1980.

IV. Films:

(NOTE: These films can be ordered from Central Office Film Library (037B1) Veterans Administration, 810 Vermont Avenue, Washington, D.C. 20420, 202/389-2780.)

A. "Setting an Adjustable Articulator to Positional Records, Part I." 18 1/2 min., 16 mm, color, 1972. Title No. 8-780.

B. "Setting an Adjustable Articulator to Positional Records, Part II." 12 min., 16 mm, color, 1972. Title No. 6-781.

C. "Preliminary Impression for Complete Dentures." 14 min., 16 mm, sound, color, 1978. Title No. 6-2368 (D-78-315)

D. "Construction of Impression Trays for Edentulous Patients." 12 min., 16 mm, sound, color, 1976. Title No. 6-2299. (D-75-271)

(NOTE: The film describes the procedures necessary to construct impression trays using activated acrylic resin. The steps from blocking out undercuts, through mixing and preparing the tray material, to finishing the periphery are detailed visually.)

PROSTHODONTICS
UNIT IX

INFORMATION SHEET

I. Terms and definitions

A. Prosthodontics--Branch of dentistry which deals with replacement of missing teeth or oral tissue by artificial means

Examples: Dentures, crowns and bridges

B. Prosthesis--Artificial substitute for a natural part

C. Direct wax pattern--Construction of a wax pattern on a prepared tooth in patient's mouth

D. Indirect wax pattern--Replica of tooth taken from a prepared impression

E. Abutment--Tooth used to support or stabilize a dental bridge

F. Articulation--Alignment of upper and lower casts simulating patient's normal occlusion

(NOTE: A metal articulator is used to hold cast in position.)

G. Equilibration--Establishing proper occlusion between the maxillary and mandibular

H. Seating a restoration--Applying a cast on or into the tooth crown

(NOTE: The final seating is cemented into place.)

I. Custom tray--Tray made of cold cure plastic designed to fit patient's mouth; used to take impressions

J. Stock tray--Tray purchased from a commercial manufacturer

(NOTE: These come in many sizes and kinds.)

Examples: Perforated or solid

K. Hydrocolloid impression--Used to take accurate detailed impressions for crown, bridges and inlays

L. Veneer--Thin line

(NOTE: This is as defined in tooth preparation.)

M. Casting--An object formed into a mold

INFORMATION SHEET

N. Disc (disk)--Flat circular plate with abrasive agent; used for smoothing and polishing

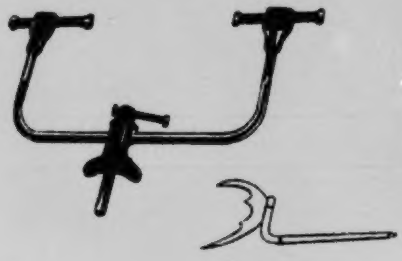
O. Roach carver--Instrument used to carve wax (Transparency 1)

P. Crown remover--Instrument used to remove crowns (Transparency 1)

Q. Alcohol blowtorch--Used to melt or soften waxes (Transparency 1)

R. Face bow (articulator)--Instrument used to register and record relationship of patient's upper teeth to the temporomandibular joints

(NOTE: The face bow is fitted with a fork, which is used to attach the face bow to the upper occlusion rim.)



S. Spatula--Used to mix stone (Transparency 2)

T. Polymerize--Reaction which causes something to set up

U. Try-in--To place something in patient's mouth to see if it will fit

II. Purposes of prosthodontics

A. Provide improved appearance for patient

B. Aid in mastication (chewing) of food

C. Aid in supporting gingiva within arch

Example: Loss of a tooth will cause change in the gingiva due to teeth shifting or elongating

INFORMATION SHEET

D. Maintain stabilization of occlusion

E. Provide support to alignment of arch

III. Types of cements used for fixed prosthodontics

A. Zinc phosphate

B. Carboxylate

C. Zinc oxide eugenol

IV. Types of dental waxes and their uses

(NOTE: There are other types of waxes besides the ones discussed here; these are the most commonly used waxes.)

A. Inlay wax--Used for casting

B. Ivory wax--Used in constructing porcelain

C. Boxing wax--Used to form a box around impressions

(NOTE: This limits the flow of plaster or stone to make a neater model.)

D. Utility wax (beading wax)--Used to modify prosthetic impression trays and to provide post dams

E. Sticky wax--Used to hold together broken pieces of dentures and components of fixed partial dentures in preparation for soldering

F. Baseplate wax--Used for occlusal rims, jaw relationships, setup and try-in for dentures and wax bites

(NOTE: This wax has many uses, but only the most frequent ones are mentioned here.)

V. Classifications of stone and their characteristics

(NOTE: Gypsum products are made from gypsum rock, a mineral found in different parts of the world. Chemically, these products are called calcium sulfate hemihydrate, and are produced as a result of various methods of heating gypsum.)

A. Class I

1. Processed by steam under pressure in closed container

(NOTE: This process makes the particles of stone more uniform in shape and less porous.)

INFORMATION SHEET

2. Provides strength and is more expensive than plaster

3. Used for making diagnostic casts and casts for full and partial dentures

B. Class II

1. Processed in a calcium chloride solution

2. Strongest stone

3. Used for making casts, dies for inlays, and crown fabrication

4. Most expensive

C. Class III

1. Processed by heating in an open kettle

(NOTE: This process creates a porous powder with irregular particles, so its uses are limited.)

2. Weakest stone

3. Used for study models and dentures

4. Least expensive

VI. Methods of controlling setting time of stone

A. Shorten setting time of stone

1. Decrease amount of water

2. Speed up mixing rate

3. Raise water temperature

4. Use accelerators

(NOTE: Chemicals used to shorten setting time and expansion are called accelerators; those used most often are borax, slurry water, sodium citrate, and potassium sulfate.)

B. Lengthen setting time of stone

1. Increase amount of water

2. Slow down mixing rate

INFORMATION SHEET

3. Lower water temperature
4. Use retarders

   (NOTE: Retarders are chemicals used to increase the length of setting time and expansion.)

VII. Basic types of impression material and their uses

A. Rigid (stone)

1. Used for secondary impressions

   Example: Study models

2. Used to record and transfer positions of casting

   Example: Crown and bridge

3. Used to obtain jaw relations of full dentures

B. Rigid (metallic)

1. Used to register final impression
2. Used to stabilize base plates in bite registration

   Example: Zinc oxide eugenol

C. Plastic

1. Used in preparation for full mouth impression

   Example: Fabrication of dentures

2. Used for taking impressions of individual teeth

D. Elastic (hydrocolloid)--Used for detailed impression of teeth

Example: Alginate-base impressions

E. Elastic (rubber base)--Used as a universal material for any procedure

(NOTE: This material is supplied in "light or syringe" weight and a "heavy or tray" weight.)

VIII. Uses of resin in prosthetics

A. Denture base

B. Denture relining

INFORMATION SHEET

C. Plastic teeth

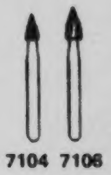
D. Temporary crowns and bridges

E. Custom impression trays

F. Athletic mouth guards

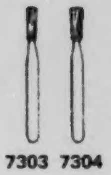
IX. Burs and their use in crowns and bridges

A.



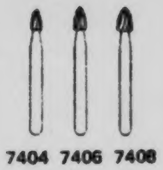
--Cutting and trimming convex and concave surfaces

B.



--Shaving fine lingual veneers and fine chamfer margins

C.


7404
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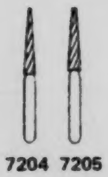
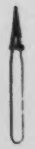
--Correcting occlusal surface and reducing excess contours

D.



--Trimming gingival margins

INFORMATION SHEET

E. 

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--Trimming gingival and interproximal surfaces

X. Types of crowns and bridges

A. Inlay (onlay)--Restoration shaped to the form of a cavity, then inserted and secured by cement

B. Artificial crown--Cap processed to cover portion of tooth which projects beyond the gumline

(NOTE: The artificial crown is made of metal, plastic or porcelain and may serve as an abutment of a bridge.)

C. Full-veneer crown--Restoration that covers entire exposed part of a tooth and preserves its appearance

D. Three-quarter crown--Restoration that covers all of the exposed tooth except the labial and buccal surfaces

(NOTE: There are other sizes of crowns, but only the most commonly used will be discussed in this unit.)

E. Pontic--Artificial tooth designed to function in the space of a missing tooth

F. Fixed bridge or fixed partial denture--Prosthesis permanently attached to natural teeth

G. Removable partial denture--Appliance which can be removed by patient; depends primarily on the mucosa for support

H. Retainer--Appliance that fits a prepared abutment tooth and supports a dental bridge

(NOTE: This is defined as used in prosthetics; in orthodontics it is a device that holds teeth in place.)

XI. Fixed and removable prosthetics

A. Fixed

1. Full crown
2. Three-quarter crown

INFORMATION SHEET

3. Jacket crown

4. Bridge

5. Inlay

6. Onlay

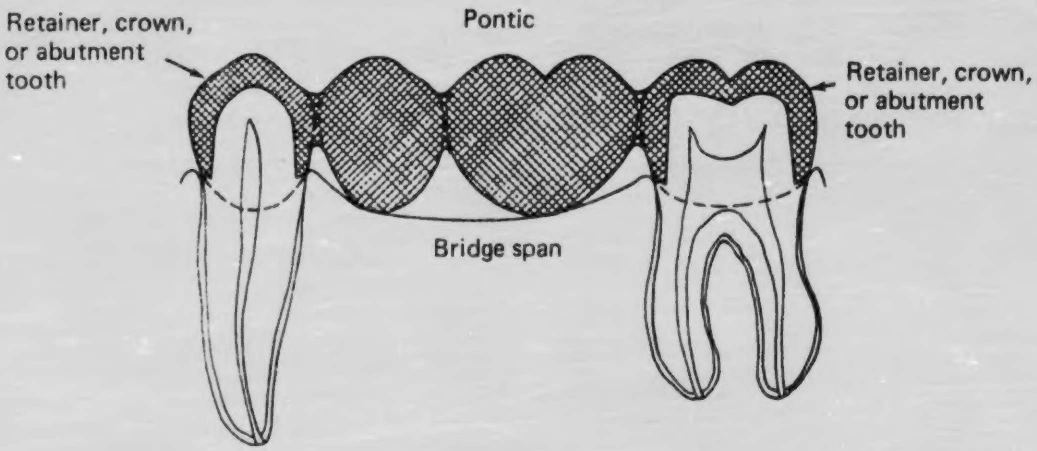
B. Removable

1. Partial

2. Denture

(NOTE: You will be introduced to the one-tooth partial in the dental office which may be called a spider, flipper, or tooth pontic.)

XII. Parts of a bridge


Retainer, crown, or abutment tooth
Pontic
Retainer, crown, or abutment tooth
Bridge span

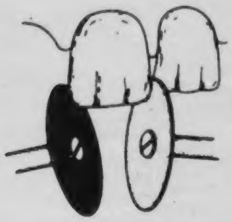
Adapted with permission of the C.V. Mosby Company from ***Theory and Practice of Crown and Bridge Prosthodontics*** by Stanley D. Tylman, copyright 1965, p. 221.

INFORMATION SHEET

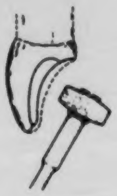
XIII. Preliminary steps in three-quarter crown preparation

(NOTE: The steps for a jacket crown and full crown are very similar.)

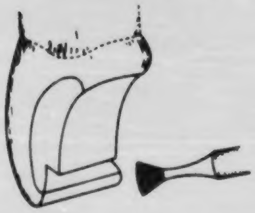
A. Slice proximal surfaces



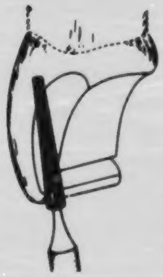
B. Reduce lingual surfaces



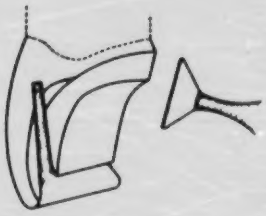
C. Notch incisal edge



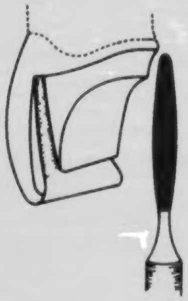
D. Prepare proximal groove



E. Reduce lingual surfaces



F. Prepare chamfer edge



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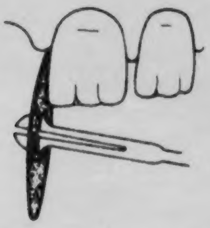
G. Polish margins



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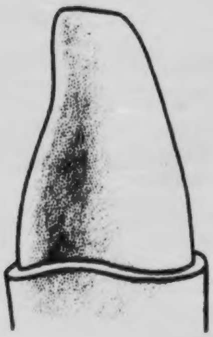
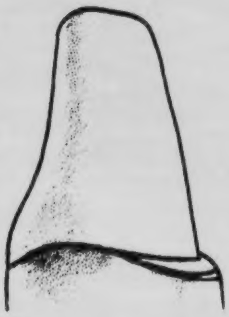
XIV. Types of finish lines used for different common crown preparations

(NOTE: It is most important that the dental assistant know finish lines because the type of procedure will determine the instruments you will prepare.)

A. Shoulder



B. Shoulder and bevel



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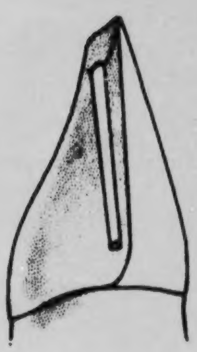
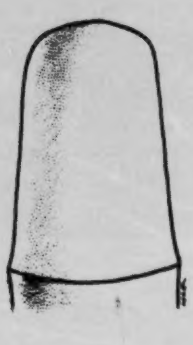
INFORMATION SHEET

C. Slice preparation



D. Chamfer



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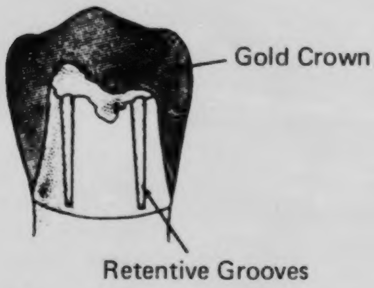
XV. Methods used before restoring severely broken down teeth

(NOTE: Often teeth used as bridge abutments will have a severe loss of visible crown portion. In these cases, the two approaches shown below may be considered to provide good retention.)

A. Multi-grooved abutment

1. Uses two or more grooves to provide retention

   Examples: Proximal, facial and lingual surfaces



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2. Provides intracoronal lock against torque (twist)

   (NOTE: This takes care of pressures during various chewing movements.)

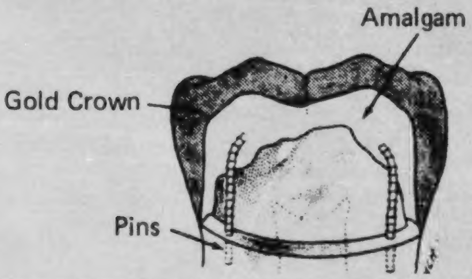
INFORMATION SHEET

B. Pin-reinforced amalgam

1. Involves buildup of lost tooth structure

   Examples: Amalgam, zinc phosphate or castings

2. Reinforced with cemented thread pins



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XVI. Instruments used in gold crown preparation

A. Local anesthesia setup (separate tray)

B. Two mouth mirrors

C. Straight and contra-angle handpieces

D. Evacuator tip (high volume)

E. Explorer

F. Cotton pliers

G. Disc or mandrel (choice)

H. Bur block with burs

I. Wedelstaedt

XVII. Types of dentures

A. Partial denture--Replaces either upper or lower teeth in arch

B. Full denture--Replaces natural teeth in upper and lower arch

C. Immediate full denture--Temporary denture constructed to permit some natural teeth to remain in mouth during preparation of the permanent denture

INFORMATION SHEET

XVIII. Duties of the dental assistant in denture construction

- A. First appointment
    1. Records oral view diagnosis, medical and dental history
    2. Takes, exposes, processes, and mounts X-rays
    3. Selects trays and mixes impression materials
    4. Pours, finishes, and articulates model
    5. Takes photograph of patient
- B. Second appointment
    1. Assists with diagnosis and prognosis
    2. Records charges and financial arrangements
- C. Third appointment
    1. Prepares tray setup for initial impression
    2. Pours and trims model
    3. Makes custom tray
- D. Fourth appointment
    1. Prepares tray setup for final impression
    2. Assists with base plates and wax rims
    3. Writes prescription for laboratory
- E. Fifth appointment
    1. Records interarch relationship, mold and mold number of teeth
    2. Assists with bite registration
    3. Writes prescription for laboratory
- F. Sixth appointment
    1. Prepares tray for wax try-in
    2. Writes prescription for laboratory

INFORMATION SHEET

G. Seventh appointment

1. Prepares tray for adjustments

2. Delivers denture

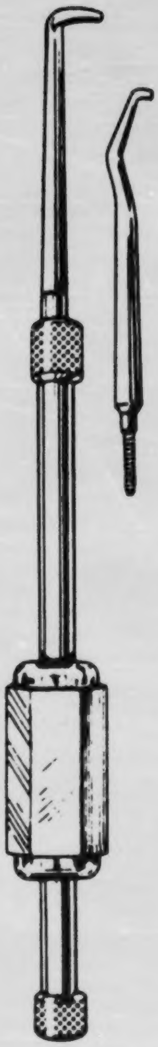
3. Makes appointment for post-delivery check

   (NOTE: This is done to correct any sore spots that might occur from patient's new denture.)

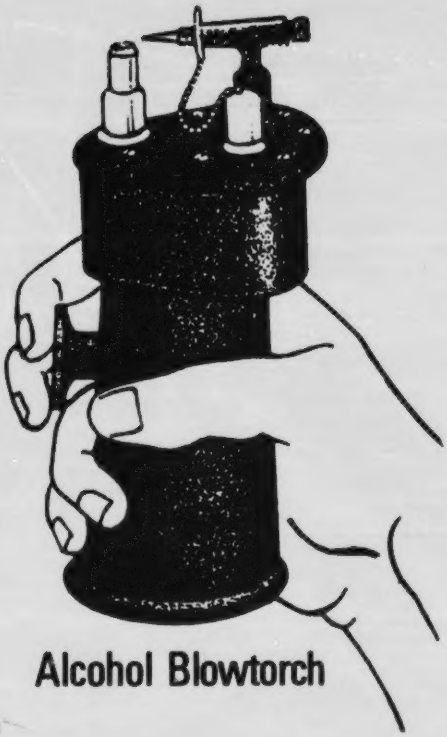
4. Educates patient in use and care of denture

DA - 459-F

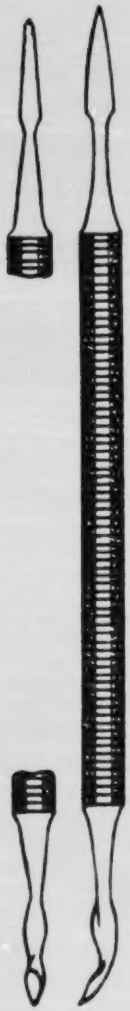
Accessory Instruments for Crown and Bridge



Dental Crown Remover



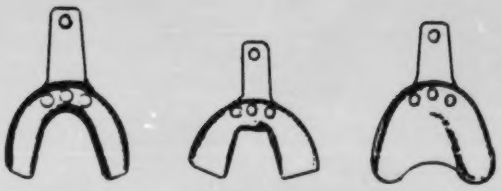
Alcohol Blowtorch



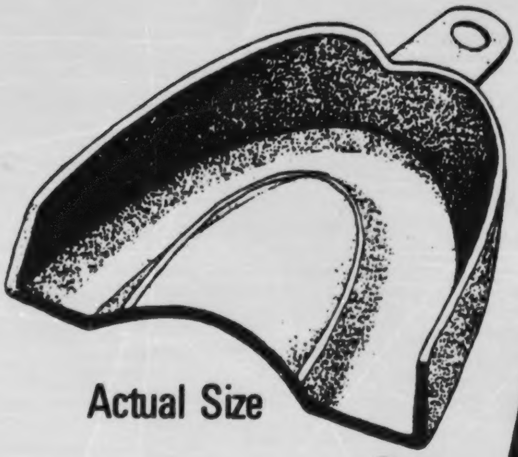
Roach Carver

1098

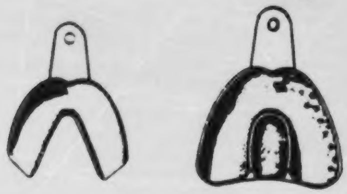
Instruments Used for Impressions

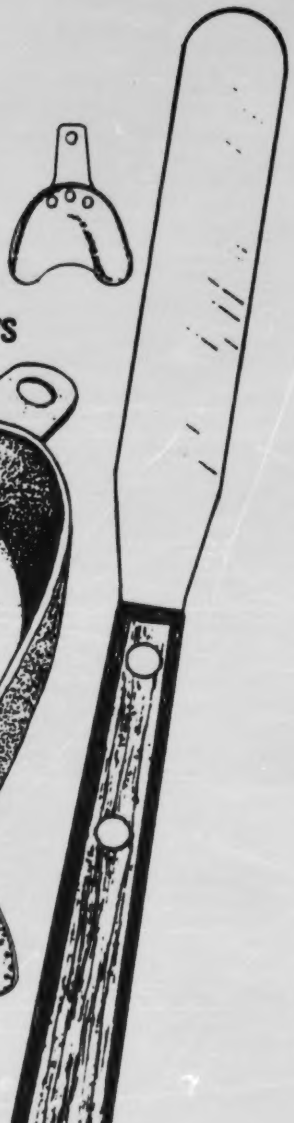


Impression Trays

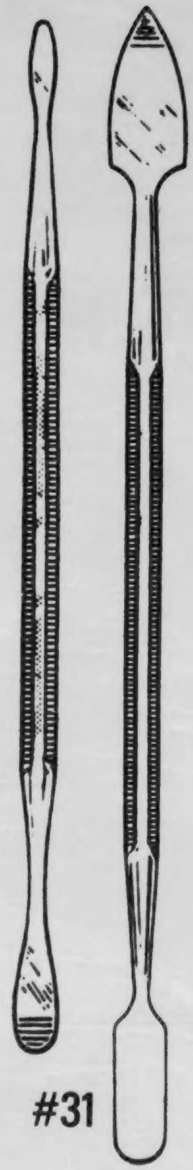


Actual Size





Mixing Spatula (flexible blade)



Wax Spatulas

PROSTHODONTICS
UNIT IX

ASSIGNMENT SHEET #1--WRITE A LABORATORY PRESCRIPTION

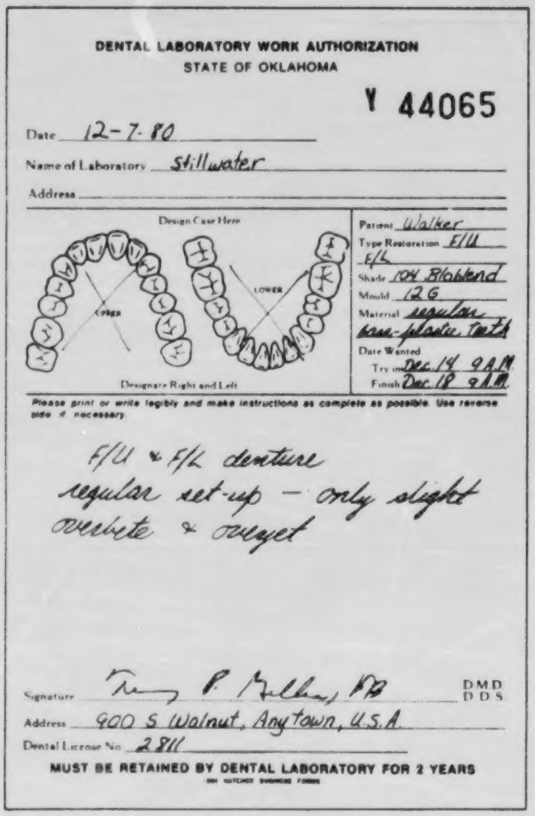
NAME ______________________ SCORE __________

PART I

When the doctor needs to send work to a dental laboratory, the dental assistant will fill out the prescription form. The doctor will dictate the work to be done and you will write it on the form. Usually you will need to fill in the doctor's name, address, license number, patient's name, and delivery date. Be careful to get all information correct.

Since most dentists use more than one laboratory, be sure to use the form in your doctor's office to record the name of the laboratory, date the prescription is sent, and date to be delivered. Sometimes you will need to phone the laboratory to learn when the work can be finished.

Below are samples of cases to be sent to laboratory. Read these carefully.



DENTAL LABORATORY WORK AUTHORIZATION
STATE OF OKLAHOMA

Y 44065

Date 12-7-80
Name of Laboratory Stillwater
Address

Design Case Here

UPPER
LOWER

Designate Right and Left

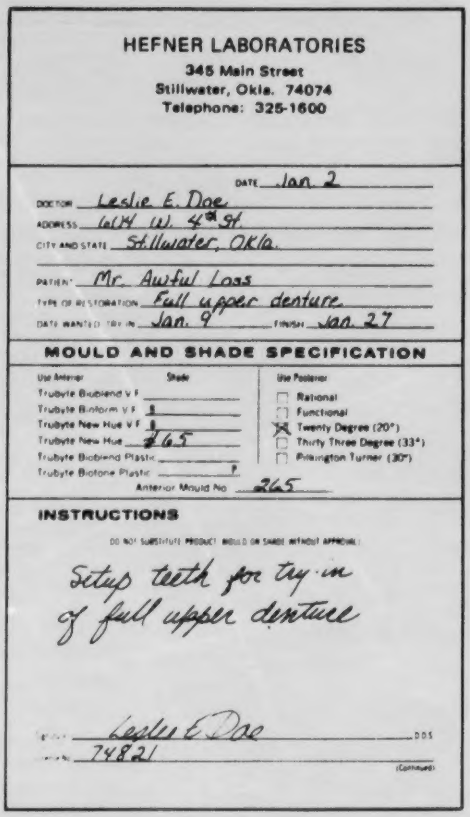
Patient Walker
Type Restoration F/U
F/L
Shade 104 Bioblend
Mould 12G
Material regular
base-plastic teeth
Date Wanted
Try in Dec. 14 9 A.M.
Finish Dec. 18 9 A.M.

Please print or write legibly and make instructions as complete as possible. Use reverse side if necessary.

F/U & F/L denture
regular set-up — only slight
overbite & overjet

Signature DMD DDS
Address 900 S Walnut, Anytown, U.S.A.
Dental License No 2811

MUST BE RETAINED BY DENTAL LABORATORY FOR 2 YEARS



HEFNER LABORATORIES
345 Main Street
Stillwater, Okla. 74074
Telephone: 325-1600

DATE Jan 2
DOCTOR Leslie E. Doe
ADDRESS 614 W. 4th St.
CITY AND STATE Stillwater, Okla.
PATIENT Mr. Awful Loss
TYPE OF RESTORATION Full upper denture
DATE WANTED TRY IN Jan. 9 FINISH Jan. 27

MOULD AND SHADE SPECIFICATION

Use Anterior — Shade
Trubyte Bioblend V F
Trubyte Bioform V F
Trubyte New Hue V F
Trubyte New Hue #65
Trubyte Bioblend Plastic
Trubyte Biotone Plastic
Anterior Mould No 265

Use Posterior
☐ Rational
☐ Functional
☒ Twenty Degree (20°)
☐ Thirty Three Degree (33°)
☐ Pilkington Turner (30°)

INSTRUCTIONS

DO NOT SUBSTITUTE PRODUCT, MOULD OR SHADE WITHOUT APPROVAL

Setup teeth for try-in
of full upper denture

Leslie E. Doe DDS
74821

(Continued)

ASSIGNMENT SHEET #1

PART 2

Use the prescription blanks on the next pages to fill in the following cases:

Case #1

Mrs. Cavity, date 3/9/82, upper and lower denture, shade #106 Bioblend, mould 14G, lucitone, plastic teeth, try-in date 10:00, April 4, finish by April 1, Dr. Calvin, 812 Ohio, Anytown, license #2741

Case #2

Mr. Redbird, date 5/7/81, mould 30L, shade 65 porcelain, mandibular partial, lingual bar, clasp on #21 and #28, type 1 clasp on #18 and #31, set teeth in wax for try-in, Dr. Brown, 821 Central, license #1141

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ASSIGNMENT SHEET #1

DENTAL LABORATORY WORK AUTHORIZATION
STATE OF OKLAHOMA

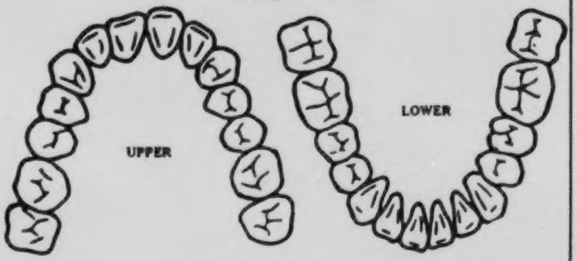
Y44065

Date ______________________

Name of Laboratory ______________________

Address ______________________

Design Case Here



Designate Right and Left

Patient ______________________

Type Restoration ______________________

____

Shade ______________________

Mould ______________________

Material ______________________

____

Date Wanted

Try in ______________________

Finish ______________________

Please print or write legibly and make instructions as complete as possible. Use reverse side if necessary.

Signature ______________________ D.M.D. / D. D. S.

Address ______________________

Dental License No. ______________________

MUST BE RETAINED BY DENTAL LABORATORY FOR 2 YEARS

-501 HATCHER BUSINESS FORMS

ASSIGNMENT SHEET #1

DENTAL LABORATORY WORK AUTHORIZATION
STATE OF OKLAHOMA

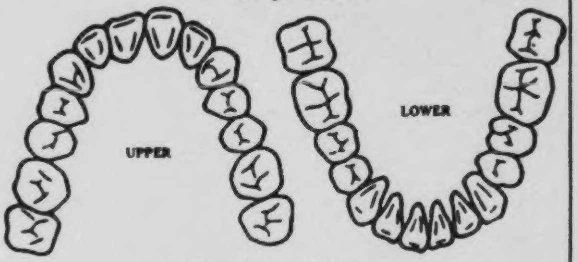
Y 44065

Date ____________________

Name of Laboratory ____________________

Address ____________________

Design Case Here



Designate Right and Left

Patient ____________________

Type Restoration ____________________

Shade ____________________

Mould ____________________

Material ____________________

Date Wanted

Try in ____________________

Finish ____________________

Please print or write legibly and make instructions as complete as possible. Use reverse side if necessary.

Signature ____________________ D.M.D. D. D. S.

Address ____________________

Dental License No. ____________________

MUST BE RETAINED BY DENTAL LABORATORY FOR 2 YEARS

-509 HATCHER BUSINESS FORMS

PROSTHODONTICS
UNIT IX

JOB SHEET #1--USE EVACUATOR FOR CROWN AND BRIDGE

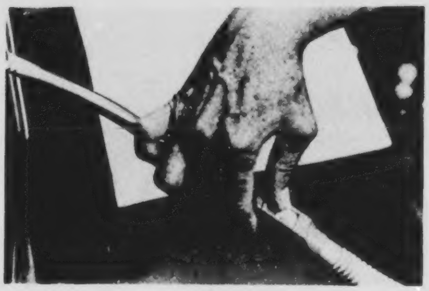
(NOTE: The grasp for high velocity suction varies on the quadrant of treatment procedure. This job sheet will deal with "four-finger wrap." See Figure 1.)

I. Materials

   A. Patient

   B. Aspirator tip

FIGURE 1



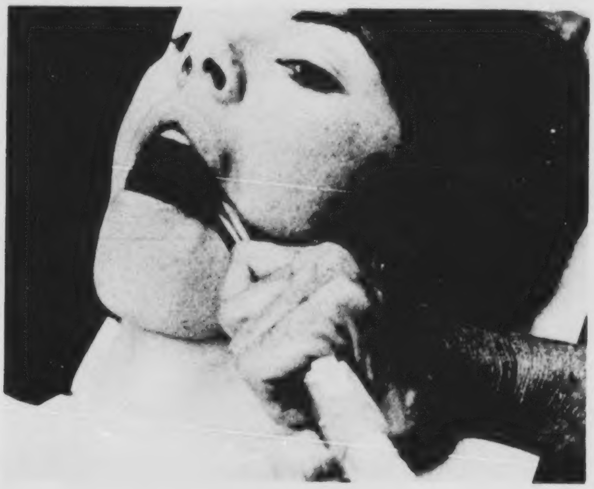
   C. Bib and chain

II. Procedure for maxillary

   A. Use four-finger wrap position for lingual (Figure 2)

   (CAUTION: Always enter aspirator tip in center of mouth to prevent injury to patient; then move to area needed.)

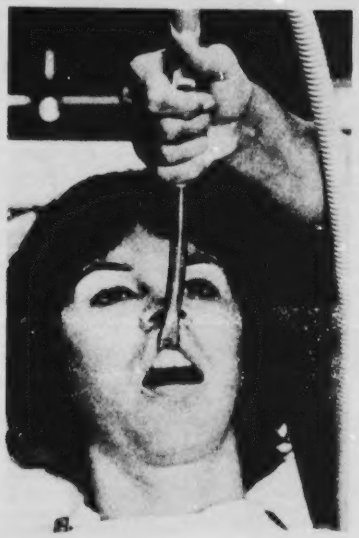
FIGURE 2



JOB SHEET #1

B. Use four-finger wrap for labial (Figure 3)

FIGURE 3



C. Use four-finger wrap for incisal (Figure 4)

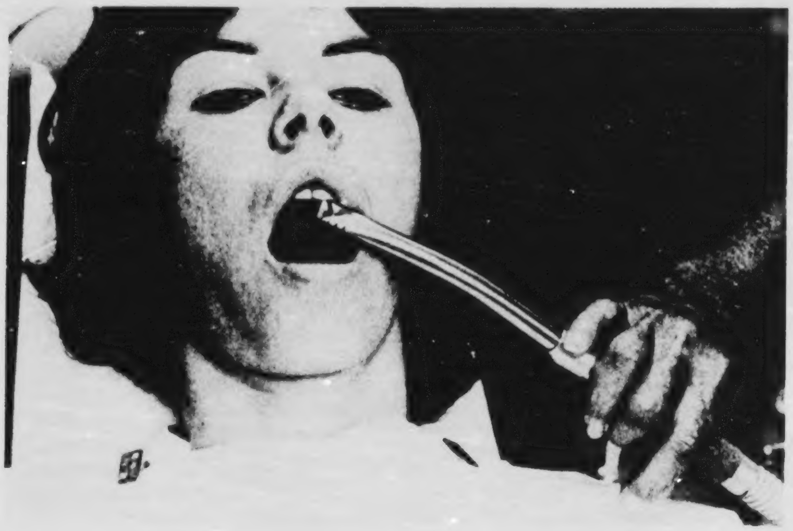


FIGURE 4

JOB SHEET #1

D. Use four-finger grasp for buccal (Figure 5)

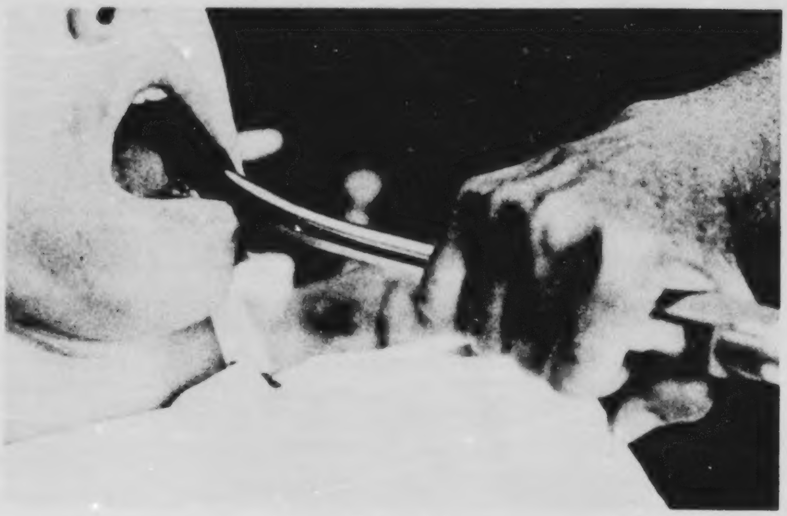


FIGURE 5

III. Procedure for mandibular

A. Use four-finger grasp for lower right lingual (Figure 6)

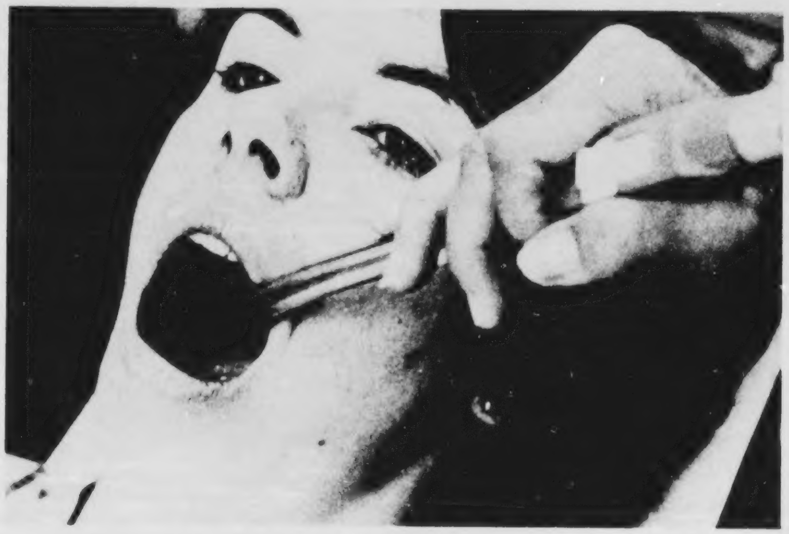


FIGURE 6

JOB SHEET #1

B. Use four-finger wrap for occlusal (Figure 7)

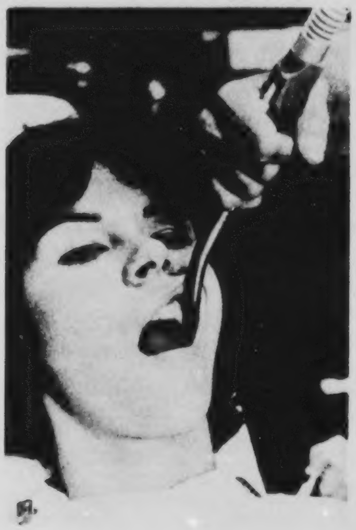


FIGURE 7

C. Use four-finger wrap for labial (Figure 8)

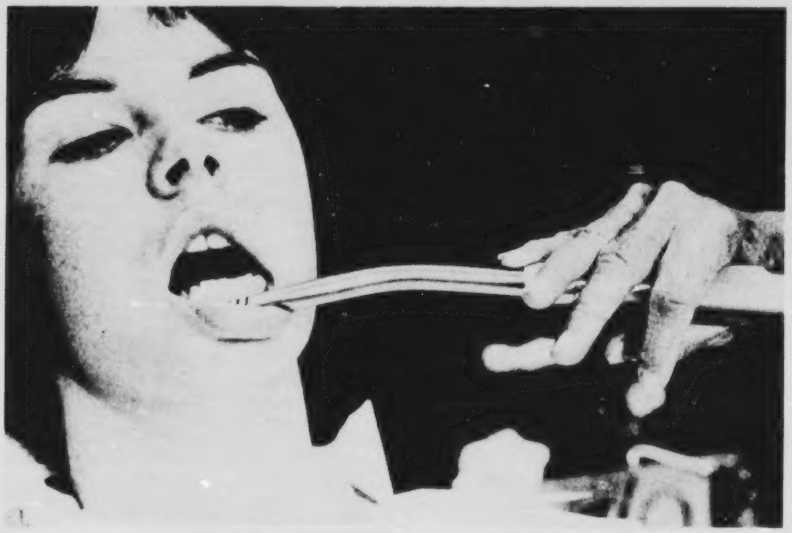


FIGURE 8

PROSTHODONTICS
UNIT IX

JOB SHEET #2--ASSIST WITH GINGIVAL RETRACTION FOR CROWN AND BRIDGE

I. Materials

A. Basic setup

B. Plastic instrument

C. Scissors

D. Cotton pellets

E. Cotton rolls

F. String soaked in hemostatic material

G. Hydrogen peroxide, water and container

II. Procedure

(NOTE: In some states the dental assistant is permitted to retract the gingivia. If it is not permitted in your state, assist the doctor with the procedure. The doctor may have prepared the gingival areas early in the process.)

A. Mix equal amounts of hydrogen peroxide and water

B. Use cotton pliers to pick up cotton pellets and dip into peroxide

C. Flush gingival area by swabbing with peroxide

D. Pack quadrant of mouth with cotton rolls and dry gingival area with warm air syringe

E. Cut a length of string about four to five inches, or determine length by circumference of prepared tooth

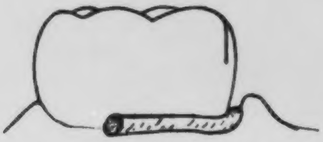
F. Use cotton pliers to pick up cotton for doctor to further dry gingiva

G. Use cotton pliers to hand string to doctor

JOB SHEET #2

H. Observe doctor gently packing string around cervical area of tooth under preparation (Figure 1)

FIGURE 1



(NOTE: The string is left in place seven to ten minutes, depending on type of chemical retractor used.)

I. Prepare tray for impression

(NOTE: The doctor will indicate the type of impression to be used.)

PROSTHODONTICS
UNIT IX

JOB SHEET #3--PREPARE A TEMPORARY CROWN

I. Materials

- A. Polymer (powder)
- B. Monomer (liquid)
- C. Alginate impression of arch
- D. Petroleum jelly
- E. Medicine dropper
- F. Dappen dish
- G. Sandpaper disc
- H. Temporary cement (doctor's choice)
- I. #7 wax spatula

II. Procedure

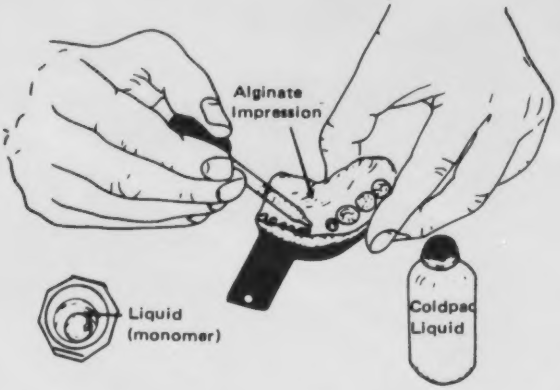
(NOTE: An alginate impression is taken at an earlier appointment and stored away. After the doctor prepares the teeth for crown and bridge, they are sensitive and must be covered with temporary crowns.)

A. Lubricate abutments with petroleum jelly

(CAUTION: If you forget to lubricate the abutment, you will be in trouble before you finish, since the impression will stick to the abutment.)

B. Use medicine dropper to put liquid into impression of teeth you are going to fix for the crowns (Figure 1)

FIGURE 1



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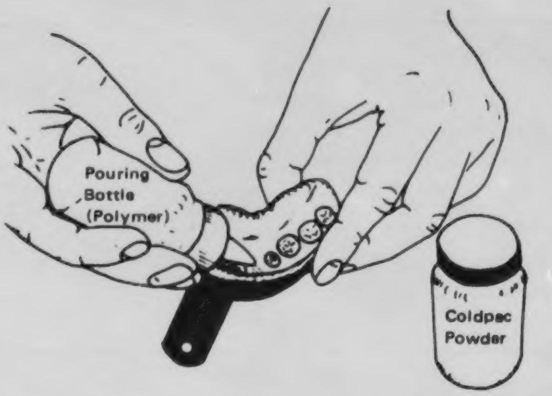
JOB SHEET #3

C. Add powder to wetted impression (Figure 2)

FIGURE 2


Pouring
Bottle
(Polymer)
Coldpac
Powder

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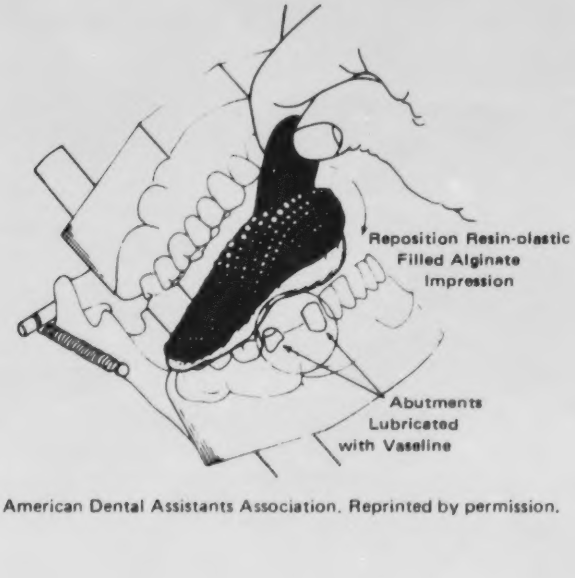
D. Add small amounts of liquid and powder until the cavity of impression is full; work quickly, as material will set up

(NOTE: After adding last liquid, the impression should be smooth.)

E. Reposition alginate impression over abutments (Figure 3)

FIGURE 3


Reposition Resin-plastic
Filled Alginate
Impression
Abutments
Lubricated
with Vaseline

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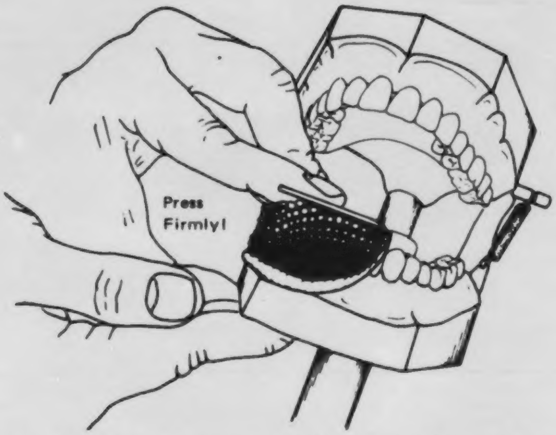
1111

JOB SHEET #3

F. Press firmly for three minutes (Figure 4)

FIGURE 4



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G. Remove impression by lifting straight up for lower teeth or pulling down for upper teeth

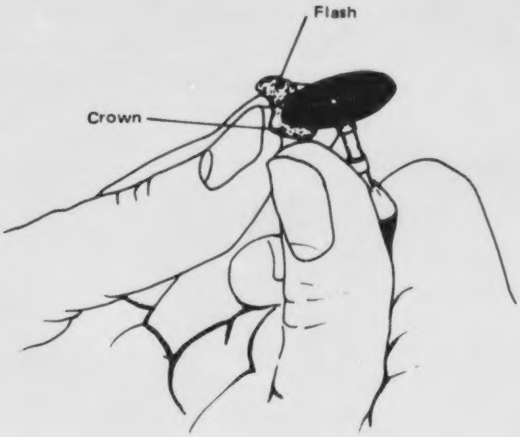
H. Run hot water over impression for two minutes to complete polymerization

I. Use a #7 wax spatula to lift out acrylic resin crowns

J. Use a sandpaper disc to remove flash (excessive material) extending out from crown in gingival area (Figure 5)

(NOTE: This should be removed to within two millimeters of the crown.)

FIGURE 5



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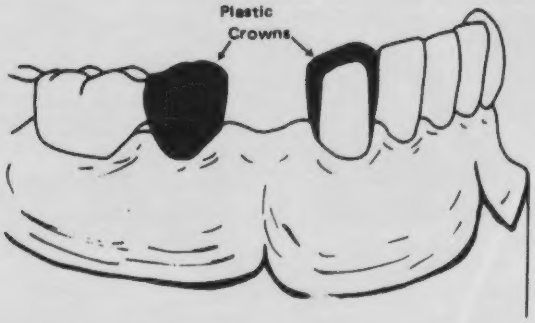
JOB SHEET #3

K. Seat crowns to tooth with temporary cement (Figure 6)

FIGURE 6



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PROSTHODONTICS
UNIT IX

JOB SHEET #4--OPERATE HYDROCOLLOID UNIT

I. Materials

A. Hydrocolloid unit (Figure 1)

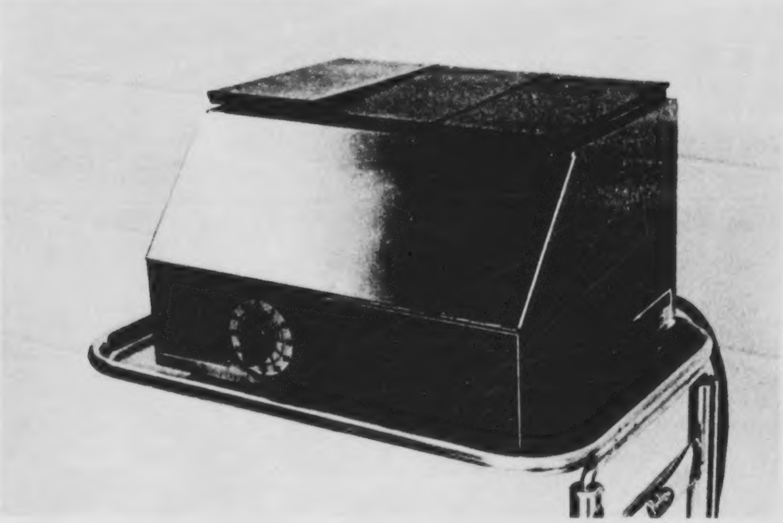


FIGURE 1

(NOTE: Tank #1 is a boiling tank; tank #2 is used for boiling and as a storage tank; tank #3 is used as a tempering tank.)

B. Hydrocolloid material (tubes)

C. Syringe material

(NOTE: This is a special material used for taking an acrylic resin impression.)

D. Syringe

II. Procedure

A. Fill each tank two-thirds full of water

(NOTE: Use warm water if you want the proper temperature to be reached faster.)

B. Turn on unit

JOB SHEET #4

C. Set timer switch for 30 minutes (Figure 2)

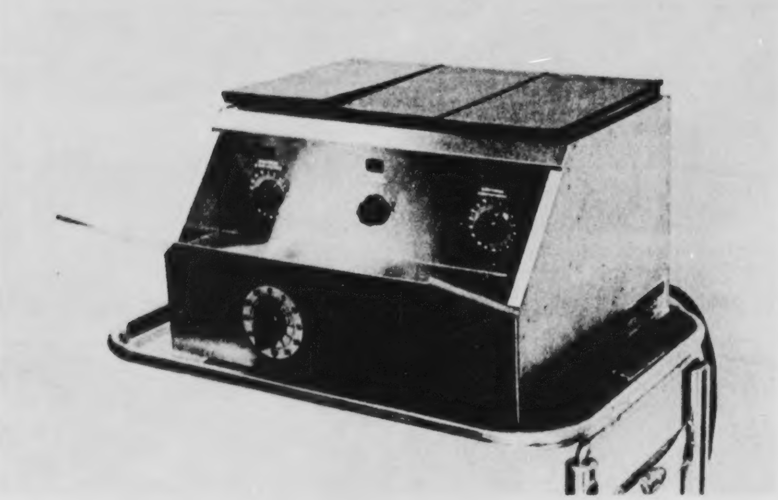


FIGURE 2

(NOTE: The temperature of the boiling bath is 212°F; the temperature of the storage bath should be 150°F - 155°F; the temperature of the tempering bath should be 110°F - 115°F. Temperatures are thermostatically regulated on the hydrocolloid unit. In order to determine temperature, the water in the individual tanks should be checked with a thermometer after the unit has been on for 30 minutes, and then at intervals until proper temperature has been established.)

D. Place tubes and loaded syringe into bath after boiling tank has begun to boil

(NOTE: Follow manufacturer's instructions for preparing the syringe.)

E. Set timer for eight minutes or time designated by manufacturer

F. Use transfer forceps to transfer material and syringe after liquefying time has elapsed

G. Reset timer for five minutes

H. Transfer material and syringe to tempering tank

PROSTHODONTICS
UNIT IX

JOB SHEET #5--TAKE AN ACRYLIC RESIN IMPRESSION

I. Materials

A. Spatula and mixing pad

B. Loaded hydrocolloid syringe

C. Hydrocolloid tubes

D. Hydrocolloid unit

(NOTE: The unit has previously been turned on and material is at the correct temperature.)

E. Tray (impression)

F. Prepared tray for gingival retraction

II. Procedure for impression

(NOTE: This job sheet can be performed on a person or a study model.)

A. Remove a tube of acrylic material from storage bath, remove cap, and extrude (press out) material onto the tray

B. Place loaded tray into tempering bath until it is ready to be used

(NOTE: The doctor has put the retraction material [string] on the gingiva.)

C. Place tubing on water supply and connector to saliva ejector in readiness for attachment of tubes for impression tray

D. Hand doctor tissue forceps to remove retraction string from gingiva

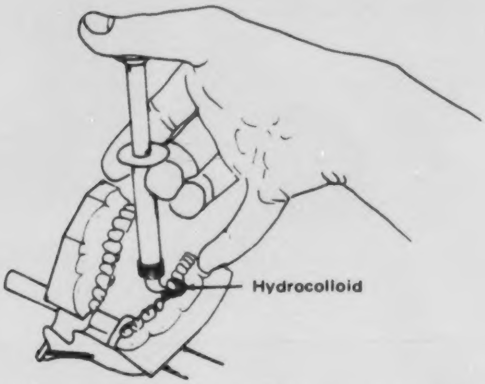
E. Remove syringe from storage bath, remove cap and extrude some material onto gauze; wipe end of syringe and pass to dentist

(NOTE: Put the cap from the syringe in a certain place each time as it is easily lost.)

JOB SHEET #5

F. Observe dentist as he or she proceeds to flow hydrocolloid around gingival area (sulcus) then around prepared surface of tooth (Figure 1)

FIGURE 1



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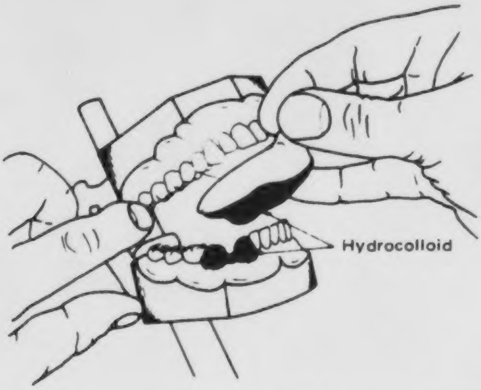
G. Remove loaded tray from tempering bath and blot surface with gauze; connect tray immediately to water tubing

H. Receive syringe from doctor in left hand and hand loaded tray to doctor with right hand

I. Observe doctor seating impression tray on impression material and prepared tooth (Figure 2)

FIGURE 2



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J. Watch for doctor to signal for you to turn on cold water slowly to circulate it through tray and back into waste line of dental unit

(NOTE: The final setting time will be approximately five to eight minutes.)

1117

JOB SHEET #5

K. Observe doctor removing tray using upward or downward motion

L. Turn off water and disconnect tubing from tray

M. Hold water connector and tray connector ends in a **U** or **V** position and put into sink

(NOTE: This is done to keep water from running out onto the floor.)

N. Rinse impression gently with cold water to remove any debris and pour up using stone

(NOTE: If it is not possible to pour impression immediately, soak impression in 4% solution of potassium sulfate to prevent distortion.)

PROSTHODONTICS
UNIT IX

JOB SHEET #6--TAKE BITE REGISTRATION

I. Materials (Figure 1)

A. Base-registration paste and accelerator

B. Paper pad and spatula

C. Bite frame

D. Gauze

E. Scissors

F. Knife

G. Sticky wax

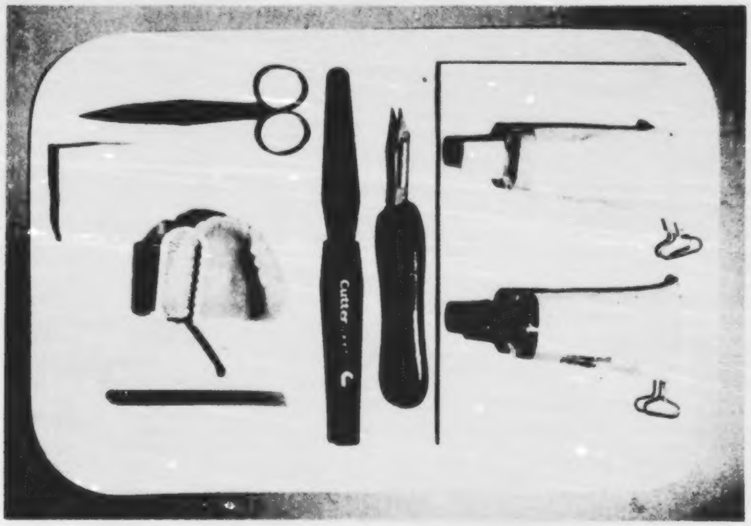


FIGURE 1

II. Procedure

(NOTE: This job sheet can be performed on a person or a study model.)

A. Place double thickness of gauze on bite frame

B. Place sticky wax on margins to affix gauze

JOB SHEET #6

C. Extrude equal lengths of base and accelerator one inch from the other on mixing pad (Figure 2)

(NOTE: Use about 1 1/4 inches for lower quadrant.)

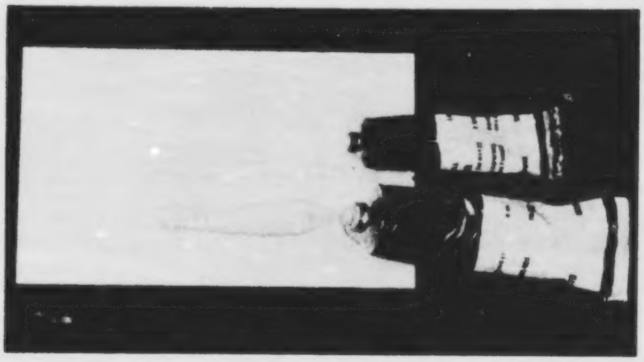


FIGURE 2

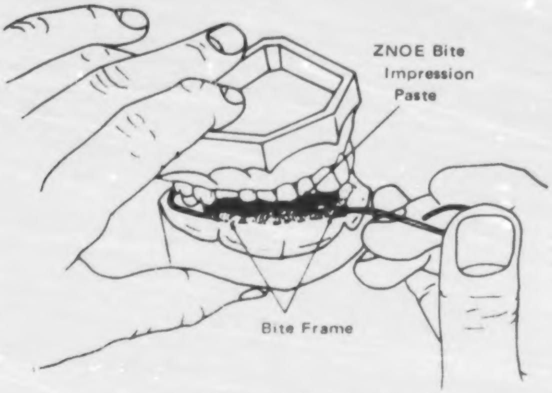
D. Spatulate together for about thirty seconds

E. Spread mix on inside of bite frame; turn tray and spread mix on other side of gauze

F. Place frame on lower quadrant and ask patient to bite down on gauze (Figure 3)

(NOTE: This will set in about three minutes.)

FIGURE 3



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G. Remove bite frame carefully from patient's mouth

JOB SHEET #6

H. Use knife to trim rough extension of material

(CAUTION: Two to three millimeters of material should be left on bite registration for articulation of occlusal surfaces on the working cast and opposing arch cast.)

(NOTE: There are many other types of bite registrations used in prosthetics.)

I. Wrap impression and bite registration to be sent to laboratory

J. Prepare a laboratory work prescription for dentist's signature

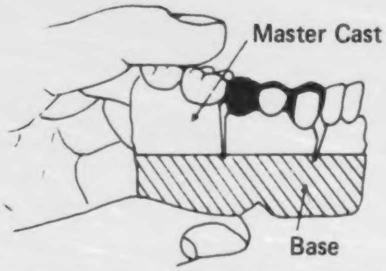
PROSTHODONTICS
UNIT IX

JOB SHEET #7--CEMENT A BRIDGE

I. Materials

- A. Basic setup
- B. Sandpaper disc mandrel and medium grit discs
- C. Tapering green carborundum stone
- D. Articulating paper and hemostat
- E. Dental floss
- F. Cotton pellets
- G. Hydrogen peroxide and 70 percent ethyl alcohol
- H. Oxyphosphate cement of zinc powder and liquid
- I. Glass slab and cement spatula
- J. Mallet and orangewood stick chaser
- K. Inlay holder, bridge holder, or cotton roll
- L. Jacquette No. 1 sickle scaler
- M. Prophy handpiece with rubber cup
- N. Pumice and tin oxide
- O. Vacuum ejector
- P. Master cast (Figure 1)

FIGURE 1



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JOB SHEET #7

II. Procedure for cementation

A. Remove temporary crowns from patient's mouth

B. Remove crowns from master cast and hand to doctor for try-in

(NOTE: The teeth will be sensitive, so the dentist may want to give the patient nitrous oxide or an injection.)

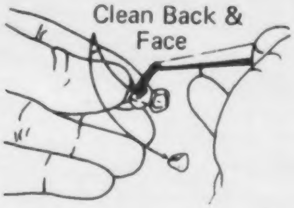
C. Observe doctor checking occlusion in centric, contact points, margins, at preparation lines, and cavo-surface angles; any rough edges may be smoothed with a green carborundum stone

(NOTE: If all the adjustments have been made, the dentist may have you cement the bridge, but only after he or she is confident that you can perform this function.)

D. Pick up pellets with cotton pliers and dip in alcohol

E. Clean backing of crown facing with pellets (Figure 2)

FIGURE 2



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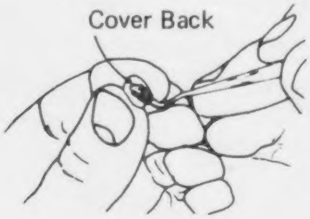
F. Mix cement using manufacturer's instructions

(CAUTION: If the cement is mixed too thin the cement will wash out and the operation will be a failure.)

G. Use cement spatula to apply cement on backing and facing (Figure 3)

FIGURE 3



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JOB SHEET #7

H. Use explorer and sandpaper disc to remove excess cement

I. Use vacuum ejector or cotton rolls to control moisture

J. Attach mandrel with prophy cup to slow speed drill and use pumice or hydrogen peroxide to clean abutments

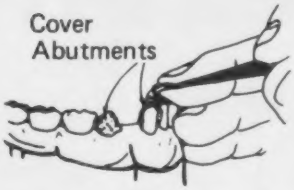
K. Use cotton pliers and cotton pellet dipped in alcohol for final cleaning of abutments

L. Use air syringe to dry abutments

(CAUTION: Abutments must be absolutely dry.)

M. Mix more cement and cover abutments (Figure 4)

FIGURE 4



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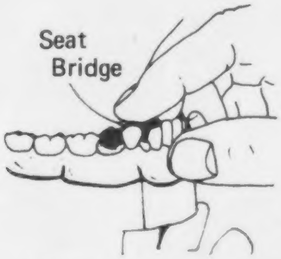
N. Seat bridge with finger pressure (Figure 5)

(NOTE: If the bridge bounces back due to trapped air, tap the bridge with a hand mallet and chaser.)

FIGURE 5



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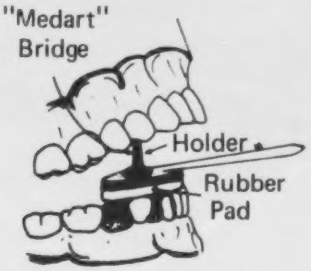
O. Remove vacuum ejector or cotton rolls

JOB SHEET #7

P. Position bridge seater and ask patient to close down hard (Figure 6)

(NOTE: The bridge seater has a rubber pad on one side which prevents it from slipping and equalizes the pressure during occlusion. If your doctor does not use a seater, have the patient bite down on cotton rolls.)

FIGURE 6



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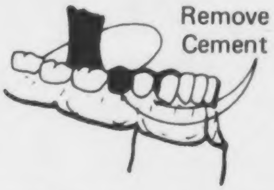
Q. Ask patient to hold bridge in place under pressure for five minutes or until cement is set

R. Use sickle scaler to remove any excess cement (Figure 7)

FIGURE 7



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S. Use dental floss to run through contact points

T. Hand patient mirror to view bridge

PROSTHODONTICS
UNIT IX

JOB SHEET #8--PREPARE A CUSTOM TRAY

(NOTE: Custom trays are used for a more accurate impression for crown and bridge.)

I. Materials

- A. Study model
- B. Paper cup
- C. Wax spatula
- D. Wax paper and cellophane
- E. Wax spatula #7
- F. Cold cure tray resin
- G. Measures (liquid and dry)

  (NOTE: The measures are usually included with the resin.)
- H. Asbestos
- I. Bowl of water
- J. Scissors
- K. Bur #8 round
- L. Slow speed handpiece (SHP)
- M. Goggles
- N. Lathe
- O. Pumice and water

II. Procedure for making tray

- A. Cut a strip of asbestos the length of the arch on study model; dip into bowl of water and place on model
- B. Cut a second piece of asbestos and repeat as above
- C. Press asbestos into place
- D. Use wax spatula to make holes in posterior part of arch

  (NOTE: These holes will provide "stops" in the tray when tray is positioned over quadrant in taking a rubber base impression.)

JOB SHEET #8

E. Measure liquid and powder

(NOTE: Follow measurements suggested by manufacturer for product being used.)

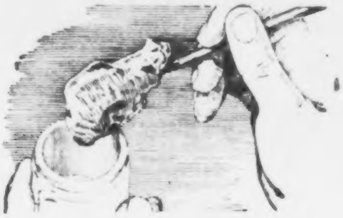
F. Dispense liquid first into paper cup, then add powder

G. Use spatula to stir into a doughy mix

(NOTE: The mass will polymerize in two or three minutes.)

H. Use the spatula to remove mass from cup (Figure 1)

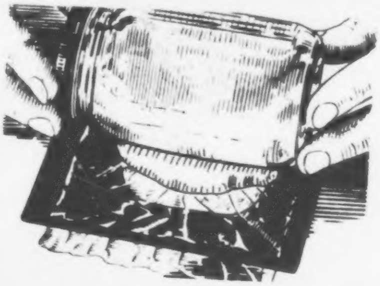
FIGURE 1



I. Press mass into wafer; then wet hands and two pieces of cellophane

J. Place cellophane on pattie and flatten with roller to 1/16 inch (Figure 2)

FIGURE 2



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(NOTE: There are other methods used to flatten patties, such as pressing them between ceramic tiles, wood, or ceramic squares.)

K. Adapt wafer to model, pressing on palatal area first and then extending to edges

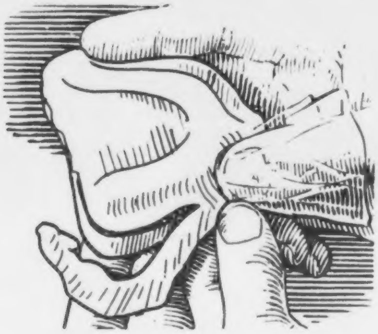
(NOTE: Pressing too hard will cause weak spots or holes in wafer, just as it would in pie crust dough.)

JOB SHEET #8

L. Use finger covered with wet cellophane to trim edges of tray (Figure 3)

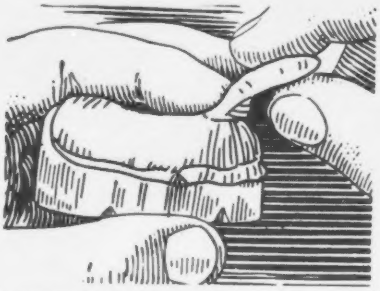
(NOTE: You can also use a wax spatula to trim away excess.)

FIGURE 3



M. Mold excess mass in hands to shape like a tray handle and adapt to anterior part of model (Figure 4)

FIGURE 4



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(NOTE: Curing takes place in about ten minutes. To decrease setting time, place in bowl of cold water.)

III. Procedure for finishing tray

A. Peel out asbestos to assist in separating tray from model

B. Place round bur in slow speed handpiece

(CAUTION: Put on goggles.)

C. Trim tray so that edges are smooth

(NOTE: Some offices prefer that you trim the tray with a lathe, and then use pumice to polish the edges.)

(CAUTION: Be sure to cover contacting [inside] surface of tray with special adhesive liquid before using rubber impression material.)

PROSTHODONTICS
UNIT IX

JOB SHEET #9--USE THE ARTICULATOR

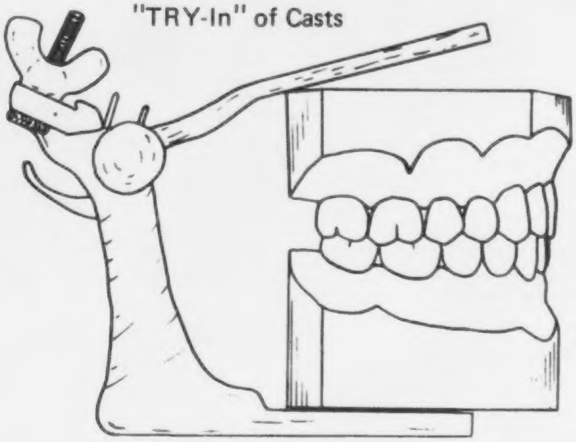
I. Materials

- A. Plaster of Paris, 50 grams
- B. Water (room temperature, 25cc)
- C. Measuring device
- D. Spatula
- E. Plaster bowl
- F. Model trimmer
- G. Articulators (Stephens, Hanau, Anatomical)
- H. Rubber band
- I. Bite wax, three sheets

II. Procedure for Stephens articulator

- A. Try cast to see if it will fit into articulator (Figure 1)

FIGURE 1



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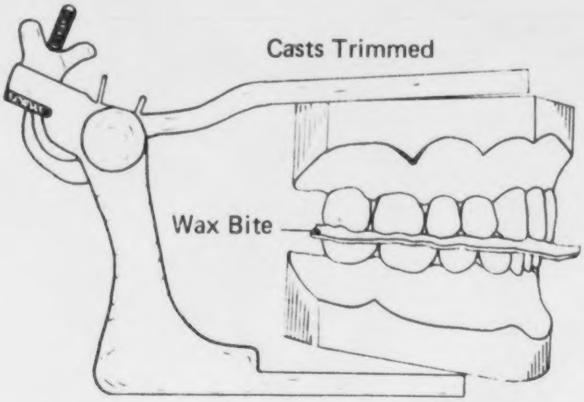
- B. Trim cast on model trimmer to fit into articulator if necessary
- C. Insert the wax bite registration (Figure 2)

JOB SHEET #9

D. Place cast into articulator and tighten the locking nut into position (Figure 2)

FIGURE 2



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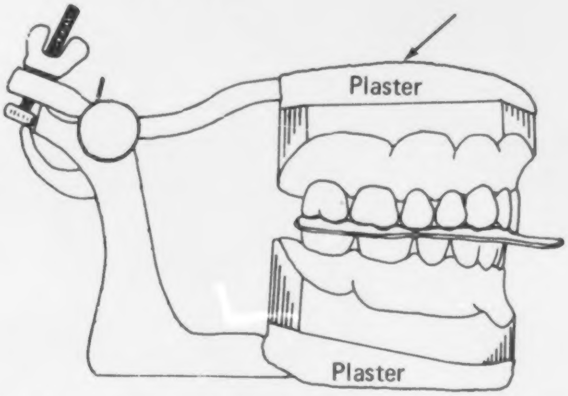
E. Mix plaster of Paris with water and spatula to a smooth mixture

F. Use the spatula to place plaster of Paris on upper and lower parts of bows to fasten them in place (Figure 3)

FIGURE 3



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G. Open cast and remove wax bite after plaster has set

(NOTE: This is the routine procedure regardless of the type of articulator you use.)

III. Procedure for Hanau articulator

A. Check articulator for proper functioning, making sure all plaster has been removed and adjustments are free

(NOTE: The paralleling of bows in the Hanau is controlled by the incisal guide pin.)

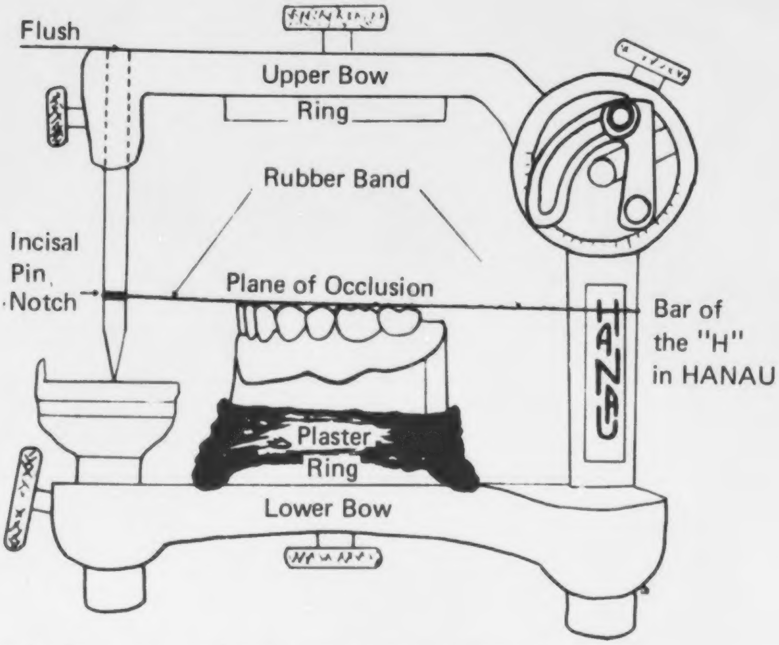
JOB SHEET #9

B. Set pin flush with the upper bow for mounting lower cast

C. Place a rubber band over entire articulator; it should rest at the notch in the incisal pin and on the H in "Hanau" imprinted on both posts

D. Place plaster on lower bow and force lower cast down into plaster until plane of occlusion of cast coincides with plane of occlusion established by rubber band (Figure 4)

FIGURE 4


Flush
Upper Bow
Ring
Rubber Band
Incisal Pin, Notch
Plane of Occlusion
Bar of the "H" in HANAU
HANAU
Plaster
Ring
Lower Bow

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E. Wait for the plaster to set up in lower arch before articulating upper arch

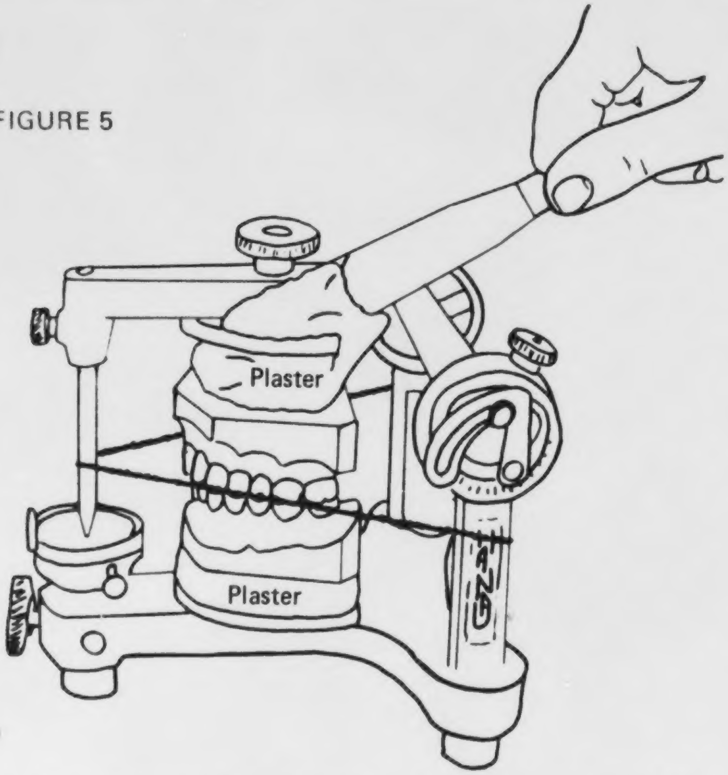
F. Mix plaster of Paris for upper arch

G. Position upper cast by using a wax bite registration

JOB SHEET #9

H. Apply plaster on upper cast to ring of upper bow of articulator (Figure 5)

FIGURE 5



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I. Remove excessive plaster and make mounting as neat as possible

J. Remove cast after plaster has set up

K. Clean parts of articulator thoroughly

L. Dry articulator and apply a thin coat of petroleum jelly or grease before storing

IV. Procedure for Anatomical articulator

A. Seat patient

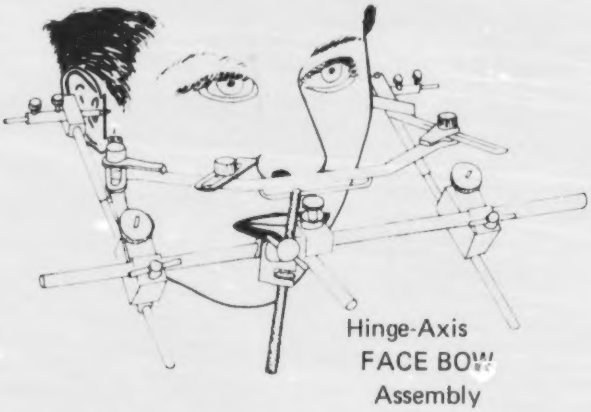
B. Hand doctor pantagraph face bow

(NOTE: This face bow is a complicated device with many adjustments.)

JOB SHEET #9

C. Observe doctor placing the face bow (Figure 6)

FIGURE 6


Hinge-Axis
FACE BOW
Assembly

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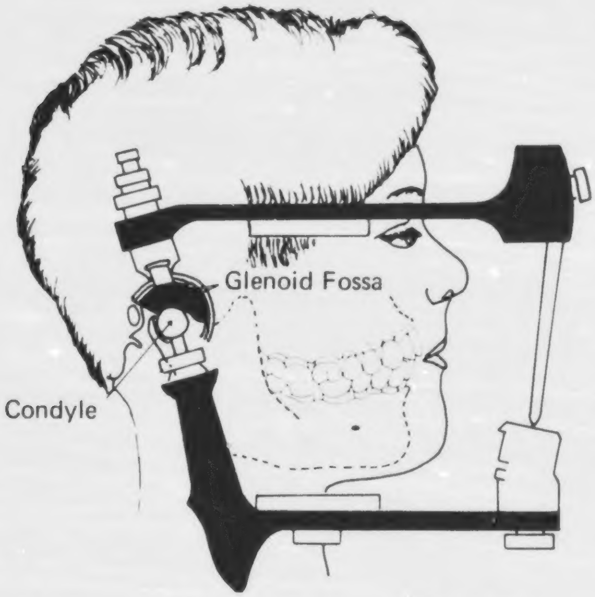
D. Make adjustments on your side of chair as directed by doctor during bite registration (Figure 7)

FIGURE 7


Glenoid Fossa
Condyle

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PROSTHODONTICS
UNIT IX

TEST

NAME ____ SCORE ____________

1. Match terms associated with prosthodontics to their definitions. Write the correct numbers in the blanks provided. Terms and definitions continue on the next page.

______a. Tooth used to support or stabilize a dental bridge

______b. Thin line

______c. Applying a cast on or into the tooth crown

______d. Artificial substitute for a natural part

______e. Tray purchased from a commercial manufacturer

______f. Replica of tooth taken from a prepared impression

______g. Branch of dentistry which deals with replacement of missing teeth or oral tissue by artificial means

______h. Tray made of cold cure plastic designed to fit patient's mouth; used to take impressions

______i. An object formed into a mold

______j. Used to take accurate detailed impressions for crown, bridges and inlays

______k. Alignment of upper and lower casts simulating patient's normal occulsion

______l. Construction of a wax pattern on a prepared tooth in patient's mouth

______m. Used to melt or soften waxes

______n. Instrument used to carve wax

______o. Used to mix stone

______p. Flat circular plate with abrasive agent; used for smoothing and polishing

1. Prosthodontics
2. Prosthesis
3. Direct wax pattern
4. Indirect wax pattern
5. Abutment
6. Articulation
7. Seating a restoration
8. Custom tray
9. Stock tray
10. Hydrocolloid impression
11. Veneer
12. Casting
13. Alcohol blowtorch
14. Roach carver
15. Crown remover
16. Disc (disk)

______q. Instrument used to remove crowns

______r. Reaction which causes something to set up

______s. Instrument used to register and record relationship of patient's upper teeth to the temporomandibular joints

______t. To place something in patient's mouth to see if it will fit

______u. Establishing proper occlusion between the maxillary and mandibular

17. Face bow (articulator)
18. Spatula
19. Equilibration
20. Try-in

2. Select from the list below purposes of prosthodontics. Mark each correct answer with an "X."

______a. Maintain stabilization of occlusion

______b. Provide support to alignment of arch

______c. Aid in mastication (chewing) of food

______d. Solve most dental problems

______e. Aid in supporting gingiva within arch

______f. Provide improved appearance for patient

______g. Result in whiter teeth

3. Select from the list below types of cements used for fixed prosthodontics. Mark each correct answer with an "X."

______a. Glue

______b. Alginate

______c. Carboxylate

______d. Zinc oxide eugenol

______e. Hydrocolloid

______f. Zinc phosphate

4. Match types of dental waxes to their uses. Write the correct numbers in the blanks provided.

______a. Used to form a box around impressions

______b. Used for occlusal rims, jaw relationships, setup and try-in for dentures and wax bites

1. Inlay wax
2. Ivory wax

______c. Used to modify prosthetic impression trays and to provide post dams

______d. Used for casting

______e. Used to hold together broken pieces of dentures and components of fixed partial dentures in preparation for soldering

______f. Used in constructing porcelain

3. Boxing wax
4. Utility wax (beading wax)
5. Sticky wax
6. Baseplate wax

5. Distinguish between characteristics of classifications of stone used in prosthodontics. Write a "I" to indicate Class I, a "2" for Class II, and a "3" for Class III.

______a. Strongest stone

______b. Used for making diagnostic casts and casts for full and partial dentures

______c. Weakest stone

______d. Processed by heating in an open kettle

______e. Provides strength and is more expensive than plaster

______f. Least expensive

______g. Used for making casts, dies for inlays, and crown fabrication

______h. Processed by steam under pressure in closed container

______i. Most expensive

______j. Processed in a calcium chloride solution

______k. Used for study models and dentures

6. Distinguish between methods of controlling setting times of stone. Write an "S" for methods that shorten setting time and an "L" for methods that lengthen setting time.

______a. Use accelerators

______b. Increase amount of water

______c. Lower water temperature

______d. Decrease amount of water

______e. Raise water temperature

______f. Use retarders

______g. Speed up mixing rate

______h. Slow down mixing rate

7. Match basic types of impression materials to their uses. Write the correct numbers in the blanks provided. Some types of materials may have more than one use.

______a. Used for detailed impression of teeth
______b. Used to register final impression
______c. Used in preparation for full mouth impression
______d. Used for secondary impressions
______e. Used to obtain jaw relations of full dentures
______f. Used for taking impressions of individual teeth
______g. Used as a universal material for any procedure
______h. Used to stabilize base plates in bite registration
______i. Used to record and transfer positions of casting

1. Rigid (stone)
2. Plastic
3. Elastic (hydrocolloid)
4. Elastic (rubber base)
5. Rigid (metallic)

8. Select from the list below uses of resin in prosthetics. Mark each correct answer with an "X."

______a. Custom impression trays
______b. Plastic teeth
______c. Correcting occlusal surfaces
______d. Denture base
______e. Athletic mouth guards
______f. Bonding brackets
______g. Splints
______h. Temporary crowns and bridges
______i. Denture relining

9. Match burs to their correct uses in crowns and bridges. Write the correct numbers in the blanks provided.

_____a. Correcting occlusal surface and reducing excess contours

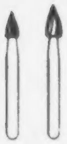
_____b. Trimming gingival and interproximal surfaces

_____c. Shaving fine lingual veneers and fine chamfer margins

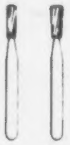
_____d. Cutting and trimming convex and concave surfaces

_____e. Trimming gingival margins

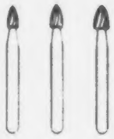
1.



2.



3.



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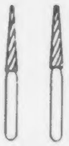

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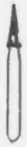


10. Match types of crowns and bridges to their descriptions. Write the correct numbers in the blanks provided.

_____a. Artificial tooth designed to function in the space of a missing tooth

_____b. Restoration that covers entire exposed part of a tooth and preserves its appearance

_____c. Restoration shaped to the form of a cavity, then inserted and secured by cement

_____d. Appliance that fits a prepared abutment tooth and supports a dental bridge

_____e. Prosthesis permanently attached to natural teeth

_____f. Cap processed to cover portion of tooth which projects beyond the gumline

_____g. Restoration that covers all of the exposed tooth except the labial and buccal surfaces

_____h. Appliance which can be removed by patient; depends primarily on the mucosa for support

1. Inlay (onlay)
2. Artificial crown
3. Full-veneer crown
4. Three-quarter crown
5. Pontic
6. Fixed bridge or fixed partial denture
7. Removable partial denture
8. Retainer

11. Distinguish between fixed and removable prosthetics. Use an "F" to indicate a fixed prosthetic and an "R" for removable prosthetic.

______a. Bridge

______b. Onlay

______c. Full crown

______d. Partial

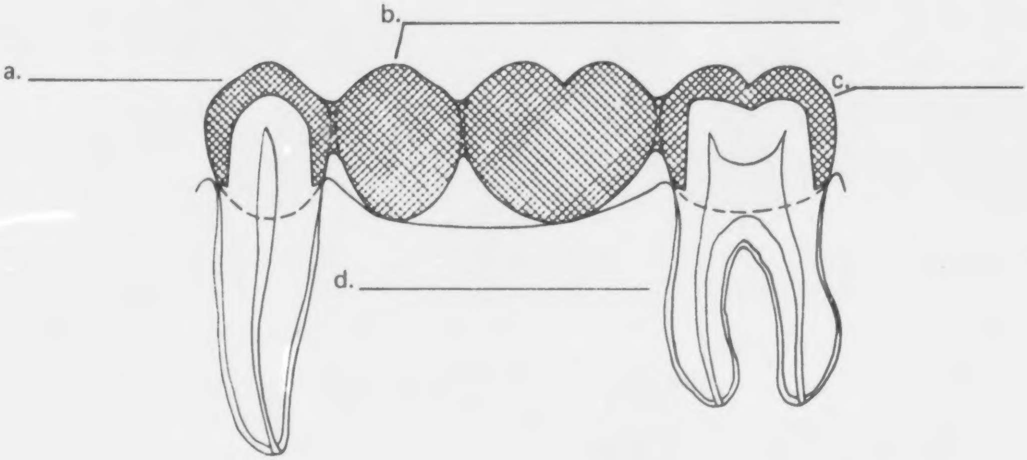
______e. Three-quarter crown

______f. Inlay

______g. Denture

______h. Jacket crown

12. Identify the parts of the bridge shown in the drawing below. Write the correct names in the blanks provided.



Retainer, crown, or abutment tooth   Bridge span   Pontic

13. Arrange in order preliminary steps in three-quarter crown preparation. Write a "1" to indicate the first step, a "2" for the second step, and so on. A blank may have more than one correct answer.

______a. Notch incisal edge

______b. Polish margins

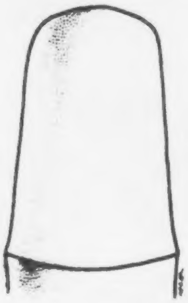
______c. Prepare proximal groove

______d. Slice proximal surfaces

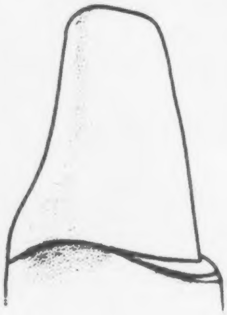
______e. Prepare chamfer edge

______f. Reduce lingual surfaces

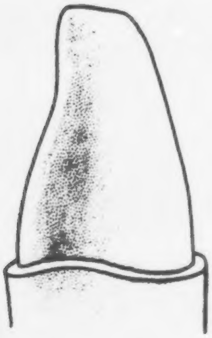
14. Label the types of finish lines used for common crown preparations shown below. Write the correct names in the blanks provided.



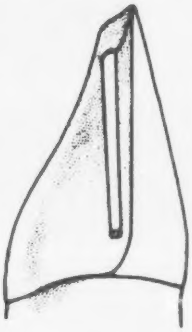
a. ______________________



b. ______________________



c. ______________________



d. ______________________

15. Distinguish between methods used before restoring severely broken down teeth. Write an "M" to indicate a multi-grooved abutment and a "P" to indicate a pin-reinforced amalgam.

______a. Provides intracoronal lock against torque (twist)

______b. Reinforced with cemented thread pins

______c. Involves buildup of lost tooth structure

______d. Uses two or more grooves to provide retention

16. Select from the list below instruments used in gold crown preparation. Mark each correct answer with an "X."

______a. Bur block with burs

______b. Explorer

______c. Composite

______d. Disc or mandrel (choice)

______e. Two mouth mirrors

______f. Amalgam

______g. Matrix retainer

______h. Straight and contra-angle handpieces

______i. Zinc phosphate

______j. Wedelstaedt

______k. Cotton pliers

______l. Forceps

______m. Evacuator tip (high volume)

______n. Local anesthesia setup (separate tray)

17. Distinguish between types of dentures. Write a "P" to indicate a partial denture, an "F" for full dentures, and an "I" for immediate full denture.

______a. Replaces either upper or lower teeth in arch

______b. Temporary denture constructed to permit some natural teeth to remain in mouth during preparation of the permanent denture

______c. Replaces natural teeth in upper and lower arch

18. Arrange in order the duties of the dental assistant in denture construction by completing the chart below. Write a "1" to indicate the duties completed in the first appointment, a "2" for duties completed in the second appointment, and so on.

a.______	1) Assists with diagnosis and prognosis 2) Records charges and financial arrangements
b.______	1) Records interarch relationship, mold and mold number of teeth 2) Assists with bite registration 3) Writes prescription for laboratory
c.______	1) Prepares tray for adjustments 2) Delivers denture 3) Makes appointment for post-delivery check 4) Educates patient in use and care of denture
d.______	1) Prepares tray setup for final impression 2) Assists with base plates and wax rims 3) Writes prescription for laboratory
e.______	1) Prepares tray for wax try-in 2) Writes prescription for laboratory
f.______	1) Prepares tray setup for initial impression 2) Pours and trims model 3) Makes custom tray
g.______	1) Records oral view diagnosis, medical and dental history 2) Takes, exposes, processes, and mounts X-rays 3) Selects trays and mixes impression materials 4) Pours, finishes, and articulates model 5) Takes photograph of patient

19. Write a laboratory prescription.

20. Demonstrate the ability to:

    a. Use evacuator for crown and bridge.

    b. Assist with gingival retraction for crown and bridge.

    c. Prepare a temporary crown.

    d. Operate hydrocolloid unit.

    e. Take an acrylic resin impression.

    f. Take bite registration.

    g. Cement a bridge.

    h. Prepare a custom tray.

    i. Use the articulator.

    (NOTE: If activities 19 and 20 have not been finished before the test, ask your instructor when they should be completed.)

PROSTHODONTICS
UNIT IX

ANSWERS TO TEST

1.	a. 5		g. 1		l. 3		q. 15	
	b. 11		h. 8		m. 13		r. 21	
	c. 7		i. 12		n. 14		s. 17	
	d. 2		j. 10		o. 18		t. 20	
	e. 9		k. 6		p. 16		u. 19	
	f. 4							

2. a, b, c, e, f

3. c, d, f

4.	a. 3	d. 1
	b. 6	e. 5
	c. 4	f. 2

5.	a. 2	g. 2
	b. 1	h. 1
	c. 3	i. 2
	d. 3	j. 2
	e. 1	k. 3
	f. 3	

6.	a. S	e. S
	b. L	f. L
	c. L	g. S
	d. S	h. L

7. a. 3
   b. 5
   c. 2
   d. 1
   e. 1
   f. 2
   g. 4
   h. 5
   i. 1

8. a, b, d, e, h, i

9. a. 3
   b. 5
   c. 2
   d. 1
   e. 4

10. a. 5
    b. 3
    c. 1
    d. 8
    e. 6
    f. 2
    g. 4
    h. 7

11. a. F
    b. F
    c. F
    d. R
    e. F
    f. F
    g. R
    h. F

12. a. Retainer, crown, or abutment tooth
    b. Pontic
    c. Retainer, crown, or abutment tooth
    d. Bridge span

13. a. 3
    b. 7
    c. 4
    d. 1
    e. 6
    f. 2 and 5

14. a. Chamfer
    b. Shoulder and bevel
    c. Shoulder
    d. Slice preparation

15. a. M

    b. P

    c. P

    d. M

16. a, b, d, e, h, j, k, m, n

17. a. P

    b. I

    c. F

18. a. 2

    b. 5

    c. 7

    d. 4

    e. 6

    f. 3

    g. 1

19. Evaluated to satisfaction of instructor

20. Performance skills evaluated to satisfaction of instructor

RADIATION SAFETY
UNIT I

UNIT OBJECTIVE

After completion of this unit the student should be able to provide radiation safety for patient and self. This knowledge will be evidenced though completion of job sheet and unit test with a minimum of 100 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with radiation safety to their correct definitions.
2. List the purposes of radiation safety.
3. Select from a list dangers involved in overexposure to radiation.
4. Select from a list methods of operator protection.
5. Select from a list methods of patient protection.
6. Select from a list characteristics of roentgen rays (X-rays).
7. Distinguish between basic types of roentgen rays (X-rays).
8. Identify parts of the X-ray tube.
9. Distinguish between a cathode and an anode.
10. Match basic parts of an X-ray unit to their functions.
11. Arrange in order path of electron beams in X-ray machine.
12. Demonstrate the ability to provide radiation safety for patient and self.

RADIATION SAFETY
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information and job sheets.

   C. Make transparencies.

   D. Order film.

   E. Discuss unit and specific objectives.

   F. Provide student with equipment and materials for job sheet.

   G. Demonstrate and discuss job sheet.

   H. Use Transparency 1 to show components and relative position of X-ray tube inside the tube head housing.

   (NOTE: Use your pencil to lay on transparency to show the flow of electrons as you explain the production process of an X-ray.)

   I. Introduce some history on why radiation safety is important.

   Examples: Discovered by Wilhelm Concord Roentgen in 1895. Many fingers have been lost due to holding film for patient; many lives lost due to lack of knowledge of radiation.

   J. Explain to students how radiation affects the sex cells.

      1. Cell changes may occur in genes, causing fragmentation of the chromosomes and mutations of genes of sex cells.

      2. Mutant genes with their altered hereditary characteristics are passed on to descendents and may become significant only in later generations.

   K. Have students prepare a research paper on the history of roentgenology if time permits.

   L. Teach this unit before students take state X-ray safety course.

   M. Give test.

II. Instructional materials:

   A. Objective sheet

B. Information sheet

C. Transparency masters

  1. TM 1--Parts of X-ray Tube

  2. TM 2--Radiographic Machine

D. Job Sheet #1--Provide Radiation Safety for Patient and Self

E. Test

F. Answers to test

III. Unit references:

A. Anderson, Pauline C. *Dental Radiology.* Albany: Delmar Publishers, 1974.

B. *Dental Specialist.* Washington: U.S. Army, 1971.

C. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W.B. Saunders Co., 1976.

D. *Radiation Protection and Safety in the Dental Office.* Oklahoma City: Oklahoma Dental Foundation, 1970.

(NOTE: This manual is used for the state radiation safety test.)

IV. Film--"Hazards of Radiation." Available from Eastman Kodak Co., Motion Picture and Education Markets Division, Motion Picture and A.V. Publication; S-10, Eastman Kodak Company, Rochester, NY 14600.

RADIATION SAFETY
UNIT I

INFORMATION SHEET

I. Terms and definitions

- A. Radiation safety--Study of prevention of overexposure to radiation
- B. Radiation--Process in which energy in the form of rays of light, heat, or X-rays is sent out from atoms and molecules as they undergo internal change
- C. Radiograph--Photographic record produced by passage of X-rays through tissue of mouth to a film
- D. Electron--Negatively-charged particle
- E. Milliampere (ma)--One thousandth (1/1000) of any ampere
- F. Milliampere seconds (mas)--Number of milliamperes of electricity flowing around a circuit in one second
- G. Voltmeter--In X-ray unit, registers the voltage of current before that voltage is stepped up by transformer
- H. Transformer--Provides a high voltage of flow of electrons
- I. Kilovoltage selector--Controls speed of electrons
- J. Kilovolt (kVp)--High voltage
- K. Kinetic--Relating to motion of materials of body forces and energies associated with them
- L. Lead apron--Used to protect patient from scattered radiation
- M. Safety badge--Used to measure amount of radiation received in any given time
- N. Cumulative--In radiation, means that each dose of X-rays adds on to earlier doses
- O. Dead man switch--Time-controlled switch which automatically terminates exposure

II. Purposes of radiation safety

- A. Protect patient
- B. Protect operator
- C. Protect auxiliary personnel

INFORMATION SHEET

III. Dangers involved in overexposure to radiation

(CAUTION: Exposure to X-rays must always be kept in safe limits because its effects are cumulative.)

- A. Changes in body cells
- B. Ulceration
- C. Sterility
- D. Cancer
- E. Leukemia
- F. Dermatosis
- G. Death

IV. Methods of operator protection

- A. Never stand in direct path of rays
- B. Never hold film for patient during exposure
- C. Always stand at least five feet from tube behind protective wall or outside radiation beam line
- D. Use X-ray badge periodically

V. Methods of patient protection

- A. Use ultraspeed film
- B. Use lead apron or shield
- C. Question patient on frequency of exposure

  Example: "Mrs. Jones, when did you last have an X-ray taken in the medical or dental office?"
- D. Consult doctor if patient has had X-rays within last 30 days

VI. Characteristics of roentgen rays (X-rays)

- A. Electromagnetic rays are of short wave length
- B. Produced by conversion of electric energy to kinetic energy
- C. Cannot be detected by any of the senses

INFORMATION SHEET

D. Have no particles or mass

E. Are a combination of electric and magnetic energy

F. Travel at high rate of speed

G. Cause irritation to living cells in excessive amounts

VII. Basic types of roentgen rays (X-rays)

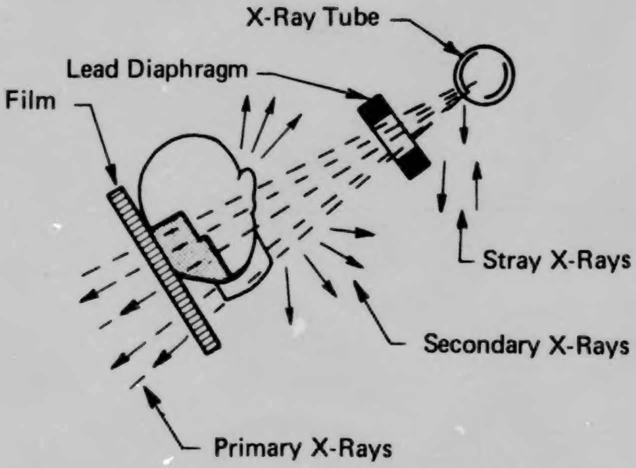
A. Primary--Useful rays projected from tube target

B. Stray--Rays that come from parts of tube rather than the target

Example: A faulty tube

C. Secondary (scattered)--Rays reflected by objects in path of X-rays

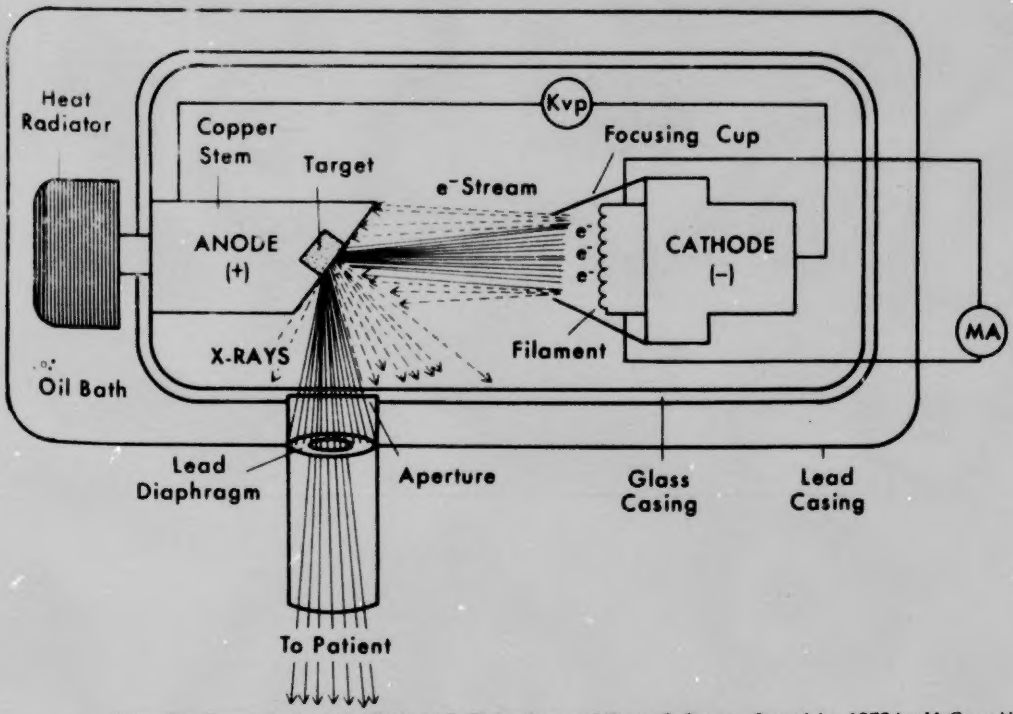
Example: Patient, chair, walls


X-Ray Tube
Lead Diaphragm
Film
Stray X-Rays
Secondary X-Rays
Primary X-Rays

Used with permission of Delmar Publishers from *Dental Radiology* by Pauline Anderson, copyright 1974, p. 5.

INFORMATION SHEET

VIII. Parts of X-ray tube (Transparency 1)


Heat Radiator
Copper Stem
Target
Kvp
Focusing Cup
e⁻ Stream
ANODE (+)
e⁻
e⁻
e⁻
CATHODE (–)
MA
X-RAYS
Filament
Oil Bath
Lead Diaphragm
Aperture
Glass Casing
Lead Casing
To Patient

From *The Dental Assistant* by Richard E. Richardson and Roger E. Barton. Copyright 1978 by McGraw-Hill Book Company. Used with permission of McGraw-Hill Book Company.

IX. Cathode and anode (Transparency 1)

(NOTE: X-rays are generated within a glass vacuum tube containing two electrodes.)

A. Cathode (negative electrode)

1. Electrons are given off by a heated filament
2. Produced by high voltage transformer
3. Propels electrons to anode

B. Anode (positive electrode)

1. Reflectors direct beam toward anode

   Example: Flashlight beams are reflected by a reflector around the beam

2. Electrons strike tungsten target and copper support
3. Impact of electrons on target produces X-rays

INFORMATION SHEET

X. Basic parts of X-ray unit and their functions (Transparency 2)

   A. X-ray unit

      1. Operates on potential scale of 55 to 120 kilovolts

      2. Selections range from 65-90 kilovolts

   B. Voltage regulator

      1. Controls amount of voltage used

      2. Registers voltage on voltmeter

   C. Master switch (off and on)

      1. Controls 110 volts, 60 cycle electric current to operate machine

      2. Warms up filament in tube when turned on

   D. Milliamperage (ma) regulator

      (NOTE: New machines do not show the voltage regulator or [ma] regulator since they are built in.)

      1. Controls amperage

      2. Registers milliamperage

      3. Operates between 10 and 15 ma

   E. Electric timer switch--Placed on extra-long cord to enable the operator to press button at a safe distance

   F. X-ray head--Contains tube, which is composed of cathode and anode

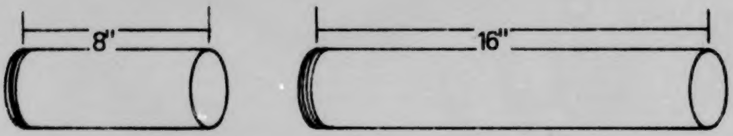
   G. Extension arm--Provides flexibility for movement of tube during preparation of X-ray exposure

INFORMATION SHEET

H. Cone--Used for focusing after film is placed in patient's mouth

(NOTE: There are long and short cones. The increase in distance of the long cone requires a four-fold increase in exposure time.)

Example: 0.025 second increased to 1.0 second



XI. Path of electron beams in X-ray machine

(NOTE: Less than one percent of the energy of the electron beams striking the target is converted into X-rays.)

A. Roentgen rays pass through a window of tube head (housing)

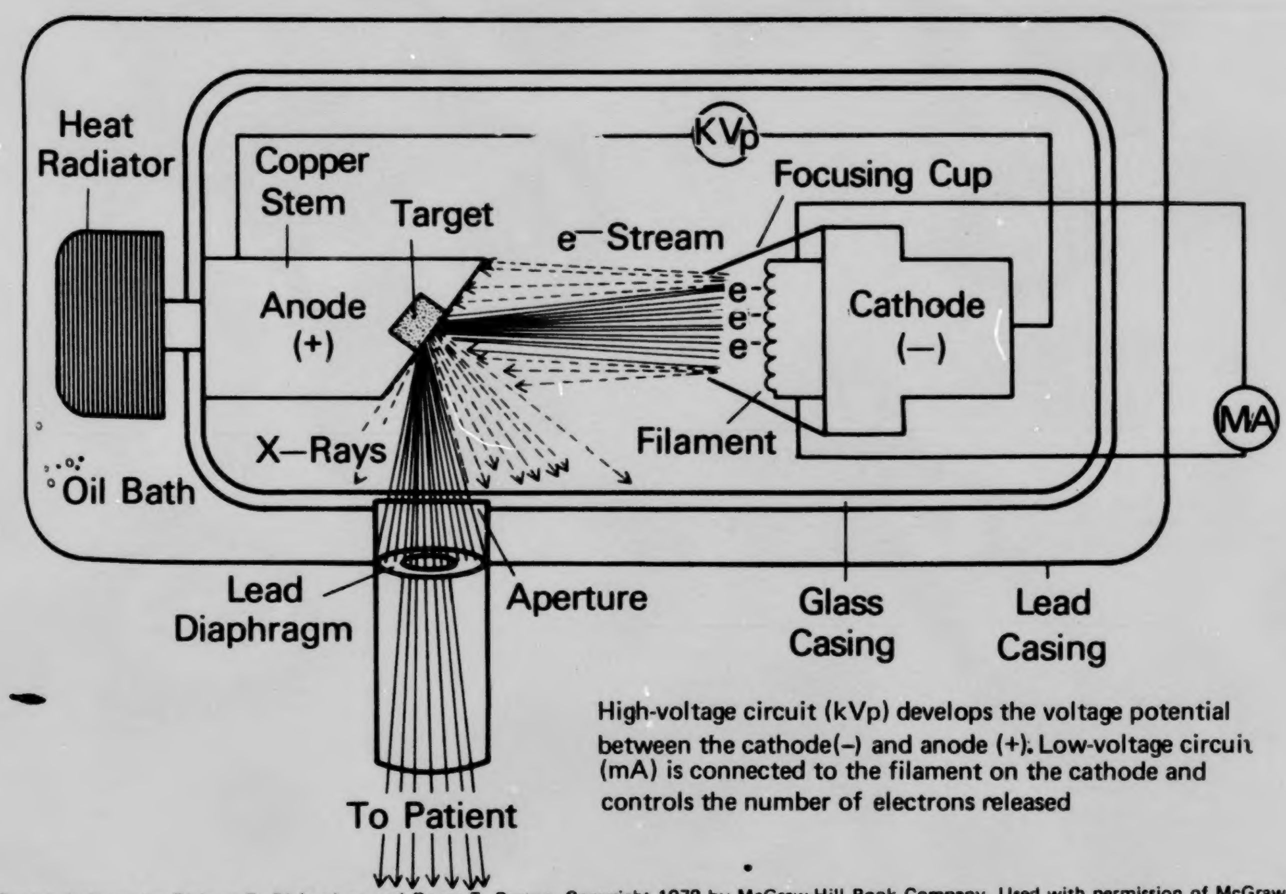
(NOTE: The window is oiled and lined with a metal case.)

B. Rays leave tube head through a hole in lead diaphragm in base of cone

(NOTE: The hole is covered by a shield [filter] which consists of an aluminum disc.)

C. Shield stops damaging X-rays and allows useful ones to pass

Parts of X-ray Tube


Heat Radiator
Copper Stem
Target
KVp
Focusing Cup
e⁻ Stream
Anode (+)
e-
e-
e-
Cathode (–)
MA
X–Rays
Filament
Oil Bath
Lead Diaphragm
Aperture
Glass Casing
Lead Casing
To Patient

High-voltage circuit (kVp) develops the voltage potential between the cathode(–) and anode (+). Low-voltage circuit (mA) is connected to the filament on the cathode and controls the number of electrons released

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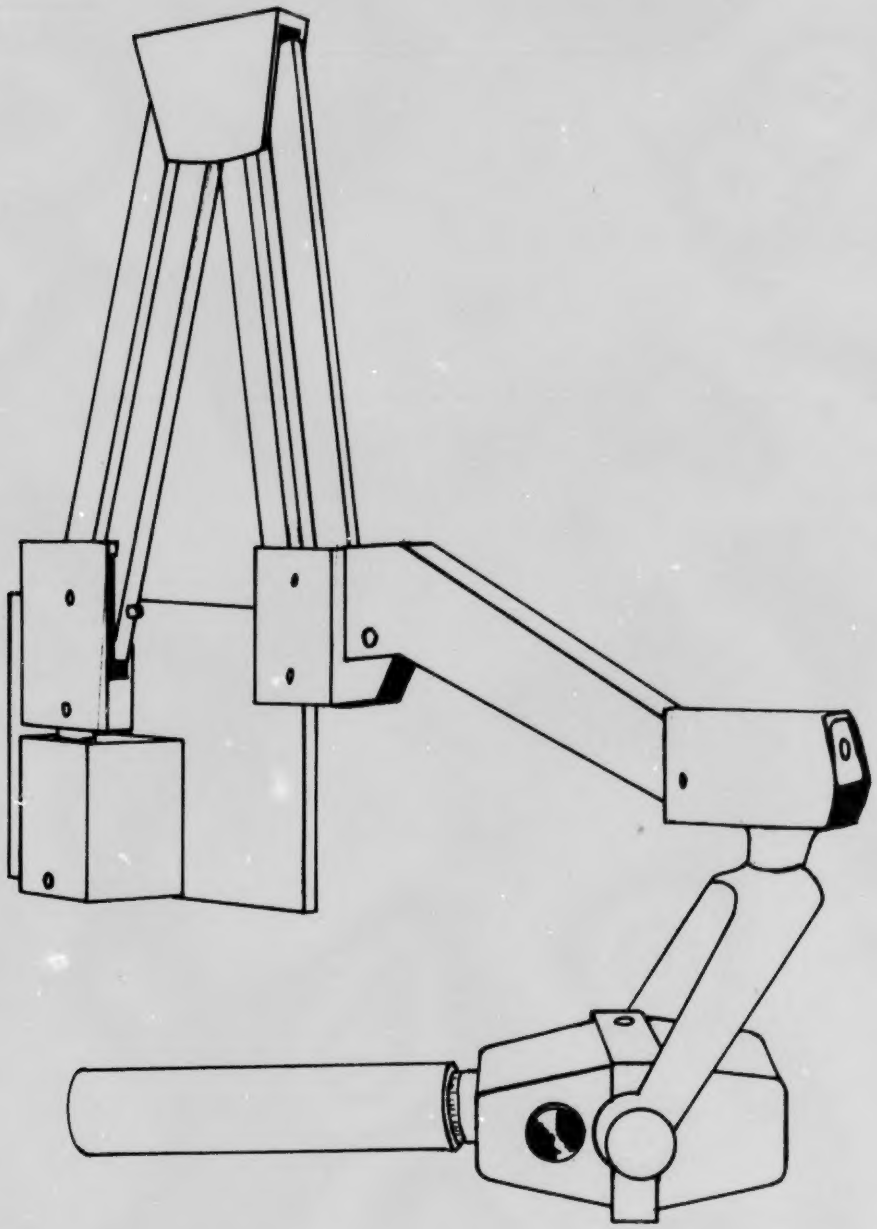
Radiographic Machine



RADIATION SAFETY
UNIT I

JOB SHEET #1--PROVIDE RADIATION SAFETY FOR PATIENT AND SELF

I. Materials

A. X-ray machine

B. Dental chair

C. Lead apron

D. Radiation badge (optional)

E. Patient's chart

II. Procedure for patient

A. Seat patient

B. Ask patient when she or he had last medical or dental X-rays taken

C. Record date on patient's chart

D. Drape patient with lead apron, being sure the apron comes up close to the neck

III. Procedure for self

(CAUTION: Since this is a practice exercise, **do not** turn on master switch.)

A. Using both hands, one on each side of tube head, pull tube head forward to the left of patient

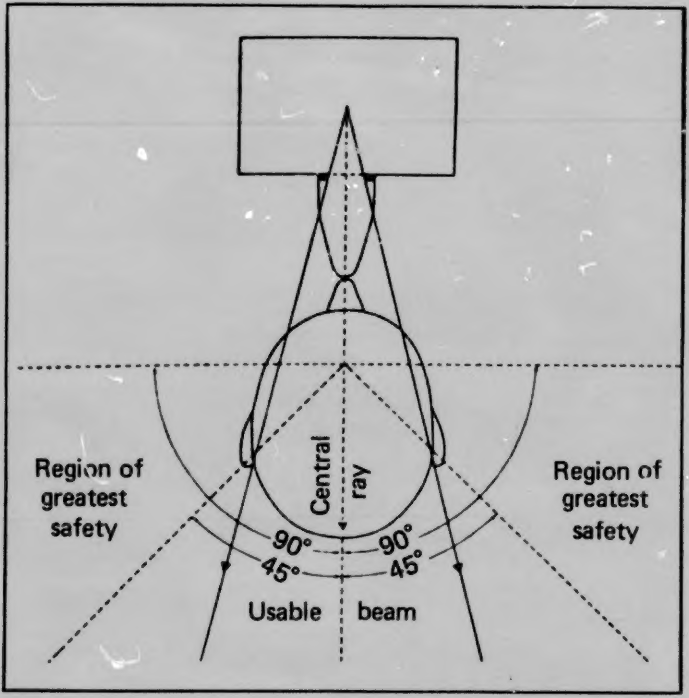
(CAUTION: This is an expensive and dangerous piece of equipment. Do not let the tube head bang against the wall as it could cause radiation leakage.)

B. Practice moving X-ray head in front of patient and to left and right of patient

JOB SHEET #1

C. Using the example below, practice positioning yourself out of line of X-ray beam (Figure 1)

FIGURE 1


Region of greatest safety
Central ray
Region of greatest safety
90°
90°
45°
45°
Usable beam

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RADIATION SAFETY
UNIT I

TEST

NAME______________________________ SCORE____________

1. Match terms associated with radiation safety to their correct definitions. Write the correct number in the blanks provided.

______a. One thousandth (1/1000) of any ampere

______b. Used to protect patient from scattered radiation

______c. Process in which energy in the form of rays of light, heat, or X-rays is sent out from atoms and molecules as they undergo internal change

______d. High voltage

______e. Used to measure amount of radiation received in any given time

______f. Controls speed of electrons

______g. In X-ray unit, registers the voltage of current before that voltage is stepped up by transformer

______h. Negatively-charged particle

______i. Provides a high voltage of flow of electrons

______j. Study of prevention of overexposure to radiation

______k. Relating to motion of materials of body forces and energies associated with them

______l. Photographic record produced by passage of X-rays through tissue of mouth to a film

______m. Time-controlled switch which automatically terminates exposure

______n. Number of milliamperes of electricity flowing around a circuit in one second

______o. In radiation, means that each dose of X-rays adds on to earlier doses

1. Radiation safety
2. Radiation
3. Radiograph
4. Electron
5. Milliampere (ma)
6. Milliampere seconds (mas)
7. Voltmeter
8. Transformer
9. Kilovoltage selector
10. Kilovolts (kVp)
11. Kinetic
12. Lead apron
13. Cumulative
14. Safety badge
15. Dead man switch

2. List purposes of radiation safety.

   a. ______________________________

   b. ______________________________

   c. ______________________________

3. Select from the list below dangers involved in overexposure to radiation. Mark each correct answer with an "X."

   _____a. Sterility

   _____b. Ulceration

   _____c. Increased susceptibility to caries

   _____d. Gout

   _____e. Changes in body cells

   _____f. Cancer

   _____g. Strep throat

   _____h. Increased blood pressure

   _____i. Blindness

   _____j. Dermatosis

   _____k. Death

   _____l. Leukemia

4. Select from the list below methods of operator protection. Mark each correct answer with an "X."

   _____a. Eliminate the dead man switch

   _____b. Never stand in direct path of rays

   _____c. Use X-ray badge periodically

   _____d. Hold film for patient occasionally

   _____e. Always stand at least five feet from tube behind protective wall or outside radiation beam line

   _____f. Use lead apron

   _____g. Never hold film for patient during exposure

   _____h. Wear protective headgear

5. Select from the list below methods of patient protection. Mark each correct answer with an "X."

______a. Use lead apron or shield

______b. Use ultraspeed film

______c. Wear tinted goggles

______d. Question patient on frequency of exposure

______e. Ask patient to use mouthwash after exposure

______f. Place cotton rolls under film

______g. Consult doctor if patient has had X-rays within last 30 days

6. Select from the list below characteristics of roentgen rays (X-rays). Mark each correct answer with an "X."

______a. Produced by conversion of kinetic energy to electric energy

______b. Cause irritation to living cells in excessive amounts

______c. Can be detected by touch and smell

______d. Cannot be detected by any of the senses

______e. Are altered by climactic conditions

______f. Electromagnetic rays are of short wave length

______g. Have no particles or mass

______h. Their distance is not a factor in the inverse square law

______i. Are a combination of electric and magnetic energy

______j. Travel at high rate of speed

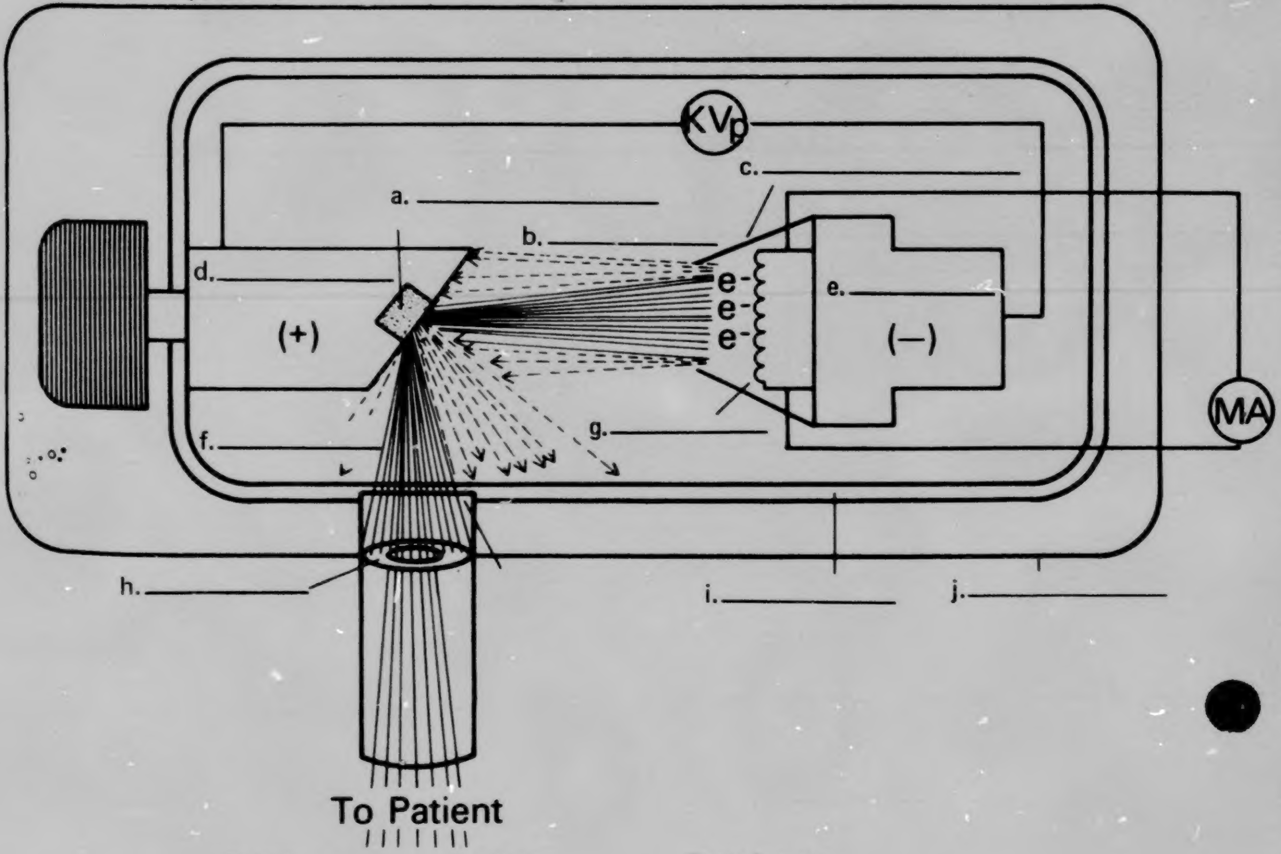
7. Distinguish between basic types of roentgen rays (X-rays). Write a "P" for primary rays, an "S" for stray rays, and a "Sec" to show secondary or scattered rays.

______a. Rays that come from parts of tube rather than the target

______b. Useful rays protected from tube target

______c. Rays reflected by objects in path of X-rays

8. Identify the parts of the X-ray tube shown below. Write the correct names in the blanks provided.



Target
Lead casing
Lead diaphragm
X-rays
e-stream
Cathode
Anode
Filament
Focusing cup
Glass casing

9. Distinguish between a cathode and an anode in the list below. Write a "C" for characteristics of a cathode and an "A" for characteristics of an anode.

______ a. Propels electrons to anode

______ b. Electrons strike tungsten target and copper support

______ c. Impact of electrons on target produces X-rays

______ d. Electrons are given off by a heated filament

______ e. Reflectors direct beam toward anode

______ f. Produced by high voltage transformer

10. Match basic parts of X-ray unit to their functions. Write the correct numbers in the blanks provided. Answers may be used more than once.

______a. Warms up filament in tube when turned on

______b. Contains tube, which is composed of cathode and anode

______c. Controls amount of voltage used

______d. Selections range from 65-90 kilovolts

______e. Registers milliamperage

______f. Provides flexibility for movement of tube during preparation of X-ray exposure

______g. Controls amperage

______h. Operates on potential scale of 55 to 120 kilovolts

______i. Controls 110 volts, 60 cycle electric current to operate machine

______j. Operates between 10 and 15 ma

______k. Placed on extra-long cord to enable the operator to press button at a safe distance

______l. Used for focusing after film is placed in patient's mouth

______m. Registers voltage on voltmeter

1. X-ray unit
2. Voltage regulator
3. Master switch (off and on)
4. Milliamperage (ma) regulator
5. Electric timer switch
6. X-ray head
7. Extension arm
8. Cone

11. Arrange in order the path of electron beams in X-ray machine. Write a "1" for the first step, a "2" for the second step, and a "3" for the third step.

______a. Rays leave tube head through a hole in lead diaphragm in base of cone

______b. Roentgen rays pass through a window of tube head (housing)

______c. Shield stops damaging X-rays and allows useful ones to pass

12. Demonstrate the ability to provide radiation safety for patient and self.

(NOTE: If the above activity has not been finished before the test, ask your instructor when it should be completed.)

RADIATION SAFETY
UNIT I

ANSWERS TO TEST

1. a. 5
   b. 12
   c. 2
   d. 10
   e. 14
   f. 9
   g. 7
   h. 4
   i. 8
   j. 1
   k. 11
   l. 3
   m. 15
   n. 6
   o. 13

2. a. Protect patient
   b. Protect operator
   c. Protect auxiliary personnel

3. a, b, e, f, j, k, l

4. b, c, e, g

5. a, b, d, g

6. b, d, f, g, i, j

7. a. S
   b. P
   c. Sec

8. a. Target
   b. e-stream
   c. Focusing cup
   d. Anode
   e. Cathode
   f. X-rays
   g. Filament

h. Lead diaphragm

i. Glass casing

j. Lead casing

9. a. C

b. A

c. A

d. C

e. A

f. C

10. a. 3

b. 6

c. 2

d. 1

e. 4

f. 7

g. 4

h. 1

i. 3

j. 4

k. 5

l. 8

m. 2

11. a. 2

b. 1

c. 3

12. Performance skills evaluated to satisfaction of instructor

ROENTGENOLOGY
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to expose X-rays and process and prepare film for the dental office. This knowledge will be evidenced by completion of assignment sheet, job sheets, and unit test with a minimum of 100% accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with roentgenology to the correct definitions.
2. State the purposes of X-rays.
3. Distinguish between intraoral and extraoral film.
4. Match types of intraoral film to their correct uses.
5. Describe characteristics of extraoral film.
6. Select from a list characteristics of dental film.
7. List types of film speed.
8. Distinguish between film requirements for full mouth X-rays of adults and children.
9. Describe proper film storage.
10. Select from a list types of X-ray equipment.
11. Arrange in order steps to take during X-ray exposure.
12. Match facial landmarks associated with roentgenology to the correct definitions.
13. Identify periapical X-ray landmarks.
14. Distinguish between vertical and horizontal angulation.
15. Distinguish between foreshortened and elongated images.
16. File dental X-rays.

17. Demonstrate the ability to:
    - a. Take bitewing X-rays.
    - b. Assemble XCP (X-Tension Cone Paralleling) instrument.
    - c. Take periapical X-rays.
    - d. Develop film.

ROENTGENOLOGY
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Order films.

   B. Make transparencies.

   C. Provide students with objective sheet.

   D. Provide students with information, assignment, and job sheets.

   E. Discuss unit and specific objectives.

   F. Discuss information, assignment, and job sheets.

   G. Provide students with materials for assignment and job sheets.

   H. Give each student a bitewing, periapical and pedodontic film as you discuss size of film.

      1. Have students open one film packet as you discuss its contents.

      2. Explain that film is sandwiched between black paper and that the lead foil at back of package prevents film from being fogged due to secondary radiation.

      3. Point out the embossed dot on film, and explain that the dot should be placed toward incisal or occlusal tooth surface when being exposed.

      4. Explain the viewing aspect of the dot after exposure.

         a. Pimple--One side of film dot is convex or pimple-like.

         b. Dimple--Looking into concave or dimple provides lingual aspect.

      5. Explain that view from the side would provide facial aspect of the ray.

         Example: Sitting on patient's tongue looking into the mouth

   I. Take students on tour of darkroom, and point out items they will be using.

      Examples: Utility light, safety light, hangers and fan

   J. Show students the developing, water, and fixer compartments of tank.

   K. Demonstrate how to raise lid on tank by turning lid to one side as you would a cooking lid on a pot to prevent moisture (water) from getting on tank top.

L. Demonstrate how to read thermometer.

M. Demonstrate how to set interval time clock.

N. Have students repeat demonstration.

O. Caution student to lock darkroom door to prevent light exposure to film.

P. Lead a discussion on faulty film.

Examples: Stained or streaked film, black spots on film, fingerprinted film, cresent shaped lines, no image

Q. Demonstrate how to drain and clean tanks.

R. Lead a discussion on using manufacturer's instructions for preparing new solutions.

S. Explain that, although over 85% of dental X-rays are exposed by dental assistants, some states do not permit dental assistants to perform this job.

T. Explain new type of film processor used in some dental offices.

U. Explain the simplicity of using a Panorex machine during a field trip to a dental office.

V. Write for free Kodak catalog of dental products and film. Address is Eastman Kodak Company, 343 State St., Rochester, NY 14650.

W. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency masters

1. TM 1--XCP (X-Tension Cone Paralleling) Instrument
2. TM 2--Ultra-Speed Film
3. TM 3--X-Ray Landmarks

D. Assignment Sheet #1--File Dental X-Rays

E. Job sheets

1. Job Sheet #1--Take Bitewing X-Rays
2. Job Sheet #2--Assemble XCP (X-Tension Cone Paralleling) Instrument

3. Job Sheet #3--Take Periapical X-Rays

4. Job Sheet #4--Develop Film

F. Test

G. Answers to test

III. Unit references:

A. Torres, Hazel O., and Ehrlich, Ann. *Modern Dental Assisting.* Philadelphia: W.B. Saunders Co., 1976.

B. Anderson, Pauline C. *Dental Radiology.* New York: Delmar Publishers, 1974.

C. *Dental Specialist.* Washington, D.C.: U.S. Army, 1974.

IV. Films:

(NOTE: This series of films demonstrates the use of the V.I.P. instrument on both a skull and a patient. Also demonstrated are methods for taking bitewings showing the interproximal crest of the alveolar bone.)

A. "Right-Angle Radiography with the Versatile Intra-Oral Positioner (V.I.P.) Part 1, Principles." 13 1/2 min., 16 mm, sound, color. Producer: VA Dental Training Center, 1977. Title No. 6-2362 (D-77-308).

B. "Right-Angle Radiography with the Versatile Intra-Oral Positioner (V.I.P.) Part II, Anterior." 10 1/2 min., 16 mm, sound, color. Producer: VA Dental Training Center, 1977. Title No. 4-2363 (D-77-309).

C. "Right-Angle Radiography with the Versatile Intra-Oral Positioner (V.I.P.) Part III, Posterior." 15 1/2 min., 16 mm, sound, color. Producer: VA Dental Training Center, 1977. Title No. 6-2364 (D-77-310).

D. "Right-Angle Radiography with the Versatile Intra-Oral Positioner (V.I.P.) Part IV, Vertical Bite-Wings." 12 min., 16 mm, sound, color. Producer: VA Dental Training Center, 1977. Title No. 6-2365 (D-77-311).

(NOTE: These films are available from the Veterans Administration, Central Office Film Library (037B1), 810 Vermont Ave. N.W., Washington, D.C. 20420.)

ROENTGENOLOGY
UNIT II

INFORMATION SHEET

I. Terms and definitions

- A. Roentgenology--Scientific study of diagnostic and therapeutic use of X-rays
- B. Roentgenography--Taking pictures of internal body structures by passing X-rays through body to act on sensitized film
- C. Roentgen ray--Radiant energy of short wave length discovered by Conrad Roentgen

  (NOTE: Roentgen rays are termed X-rays.)
- D. Panoramic--Any one of several techniques for making X-rays of all teeth and structures on one film
- E. Radiopaque--Tissue or material that is resistant to passage of X-rays
- F. Radiolucent--Tissue or material that allows some or all X-rays to pass through
- G. Rem--Radiation equivalent in human beings

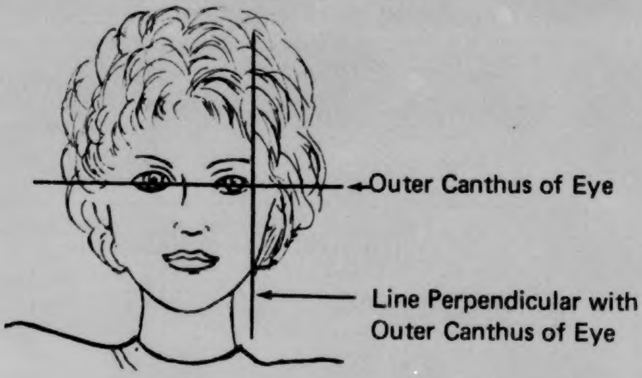
  Example: Unit Dose--1 R.
- H. Voltmeter--Instrument for measuring voltage or electromagnetic force
- I. Millimeter (mm)--One one-thousandth of a meter
- J. Milliammeter--Gauge that records electric current in milliamperes
- K. Parallel--Lines that never cross

  Example: Side by side
- L. Horizontal--Parallel with floor
- M. Vertical--Straight up and down

INFORMATION SHEET

N. Perpendicular--Line at right angle to another line or surface

Example: Line that would run up and down from outer canthus of eye



O. X-Tension Cone Paralleling Instrument (XCP)--Instrument used for positioning X-rays (Transparency 1, Job Sheet #2)

II. Purpose of X-rays

A. Assist dentist in determining condition of teeth and surrounding structures

B. Aid in preventive care

Example: Finding dental needs that cannot be seen by the eye

III. Intraoral and extraoral film

A. Intraoral--Used inside mouth

(NOTE: The prefix "intra" means inside.)

B. Extraoral--Used outside mouth

(NOTE: The prefix "extra" means outside.)

INFORMATION SHEET

IV. Types of intraoral film and their uses (Assignment Sheet #2)

(NOTE: Intraoral film is the most frequently used in general dentistry.)

- A. Periapical--Used to view crowns, roots, and supporting structures of teeth

  Examples: Bone loss, advancement of caries, abscesses, and abnormalities associated with supporting structures

  (NOTE: These films are made in two sizes--standard #1 and child size #10.)

- B. Bitewing (interproximal)--Used to view crown portion of posterior teeth

  Example: Detect caries between teeth

  (NOTE: These films are made in three sizes--#10 for anterior, #12 for bicuspids or molars, and #3 for bicuspids, molars, or doctor's choice.)

- C. Occlusal--Used to view maxillary and mandibular arch when fractures or gross pathological conditions are suspected

  (NOTE: These are the largest periapical films; they are approximately 2 1/2 to 3 inches in size.)

- D. Pedodontic (pedo)--Used to obtain periapical radiographs of children or adult with a very small mouth

V. Characteristics of extraoral film

- A. Used for examination of facial bones, jaws and TMJ (temporomandibular joint) articulation
- B. Supplied in sheets

  (NOTE: Each sheet is enclosed in protective paper.)

- C. Must be placed in film holder in total darkness

  Example: Darkroom

- D. Obtained in sizes 5 x 7, 8 x 10, and 10 x 12

VI. Characteristics of dental film

- A. Made from cotton fibers embedded in a strip of cellulose acetate
- B. Given a blue tint to prevent eyestrain while viewing
- C. Coated with emulsion of silver halide in gelatin

  (NOTE: After the gelatin is applied, the strips are dried, cut, and placed in packets according to desired size.)

INFORMATION SHEET

VII. Types of film speed

- A. Regular (radiatized)
- B. Ultra-speed (Transparency 2)

  (NOTE: There is a film called slow speed, which is no longer being used.)

VIII. Film requirements for full mouth X-rays of adults and children

- A. Adult--Fourteen periapical and two bitewing

  (NOTE: Some doctors prefer sixteen periapicals--nine maxillary and seven mandibular. Occasionally a doctor will take eighteen periapicals and four bitewings, depending on the type of examination.)

- B. Children--Ten periapical and two bitewing

IX. Proper film storage (Assignment Sheet #1)

(CAUTION: No film should be stored longer than expiration date on its package.)

- A. Reserve film--Store in a cool, dark place
- B. Currently used film--Store in lead dispenser
- C. Exposed film--Store in lead receptacle

  (NOTE: Exposed film is stored in a lead receptacle for protection against stray radiation until time permits for developing.)

X. Types of X-ray equipment

- A. Standard intraoral
- B. Panorex (panoramic)
- C. Orthopantomograph

XI. Steps to take during exposure of X-ray

- A. Turn on switch
- B. Check voltmeter

  (NOTE: If the voltmeter registers the desired reading, this assures you that the current is reaching the machine.)

INFORMATION SHEET

C. Turn dial counterclockwise to set timer for desired number of seconds for particular exposure

D. Place film

E. Position tube

F. Press release button to make exposure

G. Allow timer to count off seconds

H. Observe milliammeter constantly during exposure

(NOTE: This is done to make sure you are getting exposure on your film.)

XII. Facial landmarks associated with roentgenology (Transparency 3)

A. Ala-tragus line (Frankfort plane)--Imaginary line drawn from ala of nostril to middle of opening for ear (tragus)

B. Ala--Winged flare of nostril as it meets cheek

C. Border of mandible--Lower margin of jaw

(NOTE: This is also referred to as inferior border.)

D. Canthus of eye--Junction of eyelids at outer corner of eye

(NOTE: Canthus is an overlapping fold of two tissues meeting to close an opening, but our concern is the outer corner of the eye.)

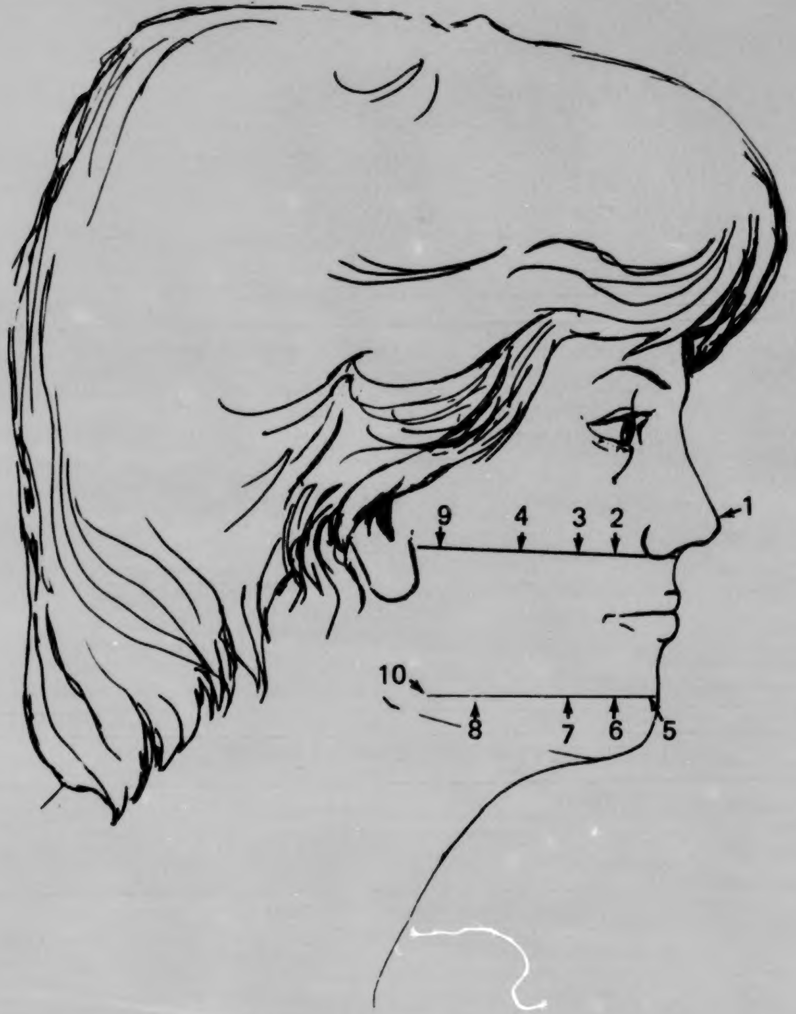
E. Zygoma--Bony (molar) process forming outer margin of cheek

F. Tragus--Tissue located anterior and toward middle of opening for ear

G. Midsagittal--Imaginary line drawn from chin through central teeth and up through nose

INFORMATION SHEET

XIII. Periapical X-ray landmarks (Transparency 3)



(1) Maxillary incisors
(2) Maxillary cuspids
(3) Maxillary bicuspids
(4) Maxillary molars
(5) Mandibular incisors
(6) Mandibular cuspids
(7) Mandibular bicuspids
(8) Mandibular molars
(9) Tragus of ear to ala of nose
(10) Border of mandible

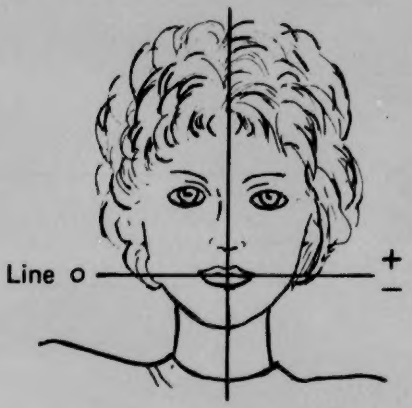
INFORMATION SHEET

XIV. Vertical and horizontal angulation

A. Vertical angulation

1. Shows accurate size of tooth

2. Starts at neutral 0° on a 360° circle

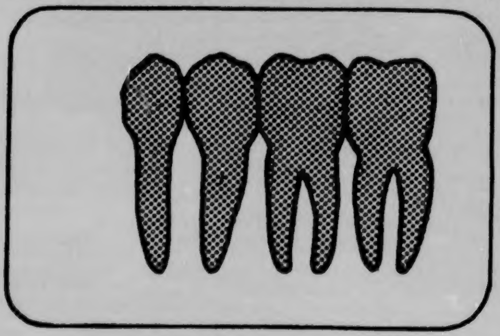


(NOTE: An increase in vertical angulation from parallel O will be shown on the X-ray machine by a "plus" [+] sign. Reduction of vertical angulation is shown by a "minus" [-] sign.)

3. Focus cone opening upward or downward with head of the unit constant on same spot

B. Horizontal angulation

1. Shows adjacent tooth structure in true form (not overlapped)

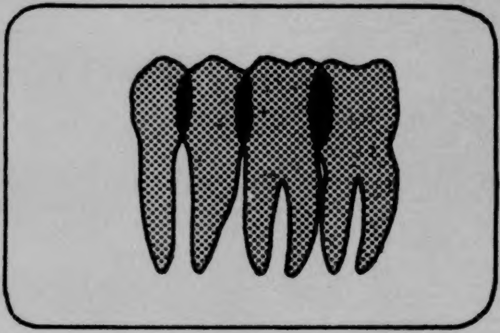


2. Starts at contact points between teeth

3. Focus cone forward toward patient with head only moved on circle parallel to floor

INFORMATION SHEET

4. X-ray will show distal tooth overlapping on mesial if focus is too distal

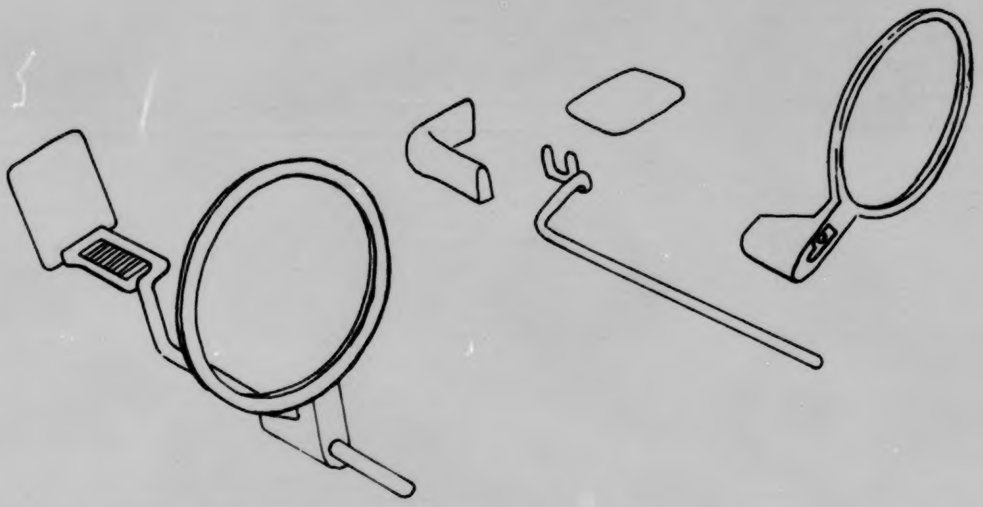


XV. Foreshortened and elongated images

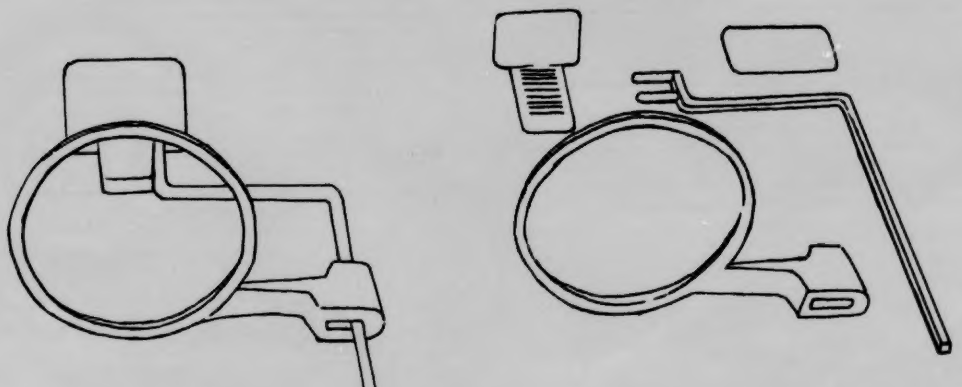
A. Foreshortened--Caused by too much angulation; image of tooth appears shorter than actual size

B. Elongated--Caused by too little angulation; image of tooth appears longer than actual size

X-C-P(X-Tension Cone Paralleling)Instrument

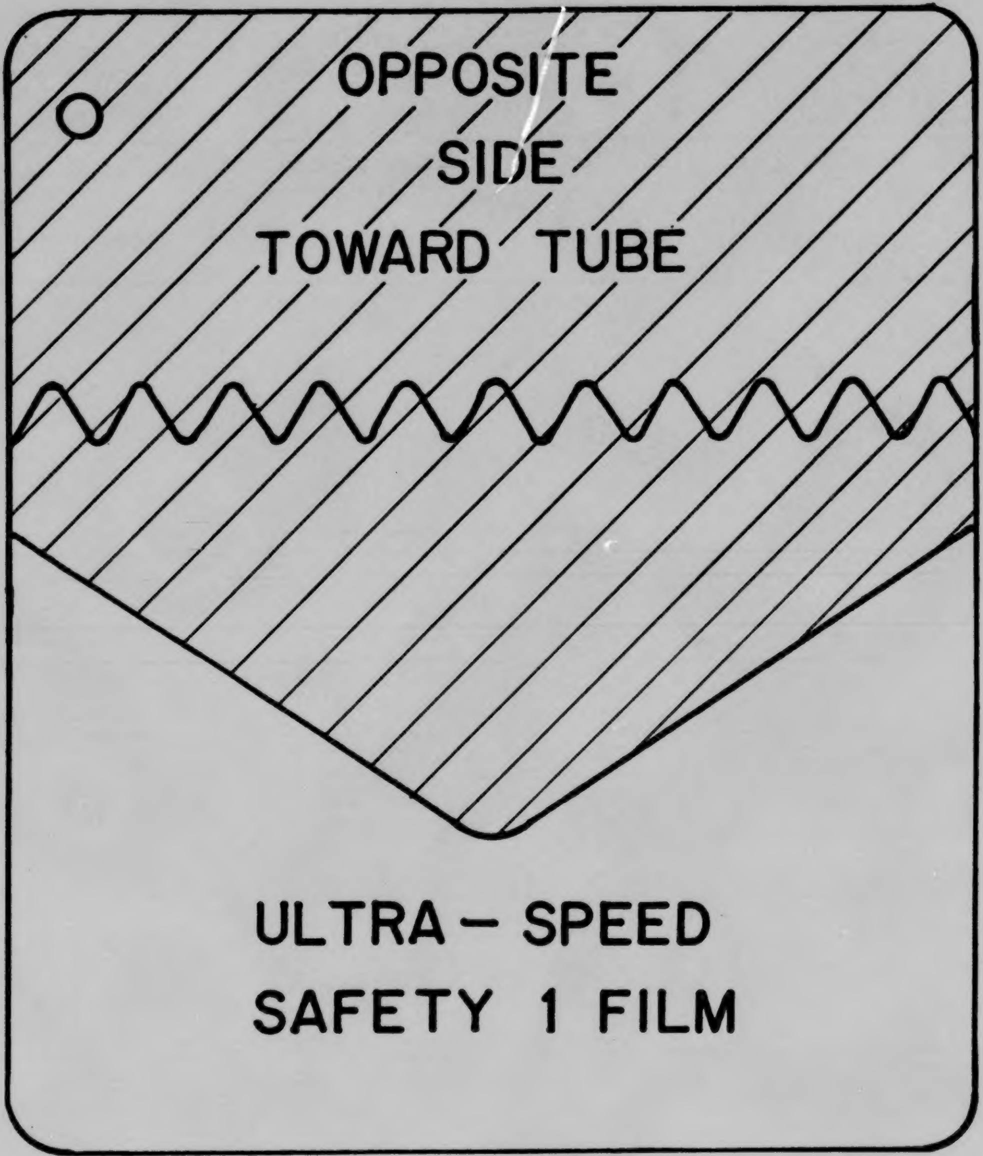


Anterior instrument assemblage



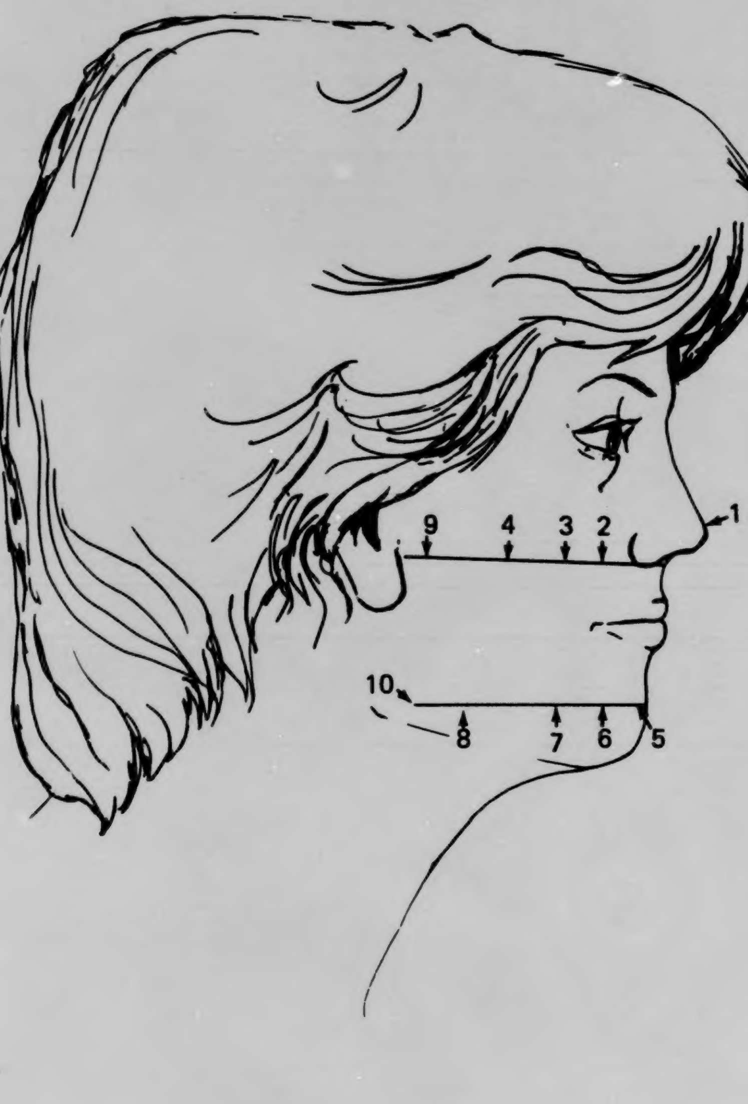
Posterior instrument assemblage

Ultra-Speed Film


OPPOSITE
SIDE
TOWARD TUBE
ULTRA – SPEED
SAFETY 1 FILM

1182

X-Ray Landmarks


1
2
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4
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10
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8

ROENTGENOLOGY
UNIT II

ASSIGNMENT SHEET #1--FILE DENTAL X-RAYS

NAME ________________________________ SCORE ______________

Dental films are the property of the dentist. All X-rays should be kept in the same envelopes, and files should be kept for eight to ten years. They are used for legal protection in a malpractice suit, to show dental progress, and sometimes to identify the deceased. Files should contain patient's name, date, X-ray file number, dentist name referral, if any, and should be filed alphabetically. It is important that you fill out film mounts and envelopes carefully and correctly.

PART I--FILM MOUNT

Practice filling out the film mount form shown below using information given to you by your instructor.

NAME ________________________________

DATE ________________________________

NUMBER (X-ray number) ________________

DENTIST ______________________________

REFERRED BY __________________________

ASSIGNMENT SHEET #1

PART II--FILM ENVELOPES

The information on the film envelope must match the information on the film mount. Fill out the envelope shown below with the same information on the film mount. Then place the patient's X-rays in the envelope and file alphabetically in the index section containing the first letter of the patient's last name.

NAME ______________________ DATE ______________________

NUMBER ____

DENTIST ____

REFERRED BY ____

ROENTGENOLOGY
UNIT II

JOB SHEET #1--TAKE BITEWING X-RAYS

I. Materials

  A. Film

  B. Bitewing tab

  C. Paper cup with water

  D. Tissue

  E. Pen

  F. Lead apron

II. Procedure

  A. Seat and drape patient with lead apron

  B. Adjust chair so occlusal plane of maxillary teeth is horizontal (parallel with floor)

  C. Wash hands

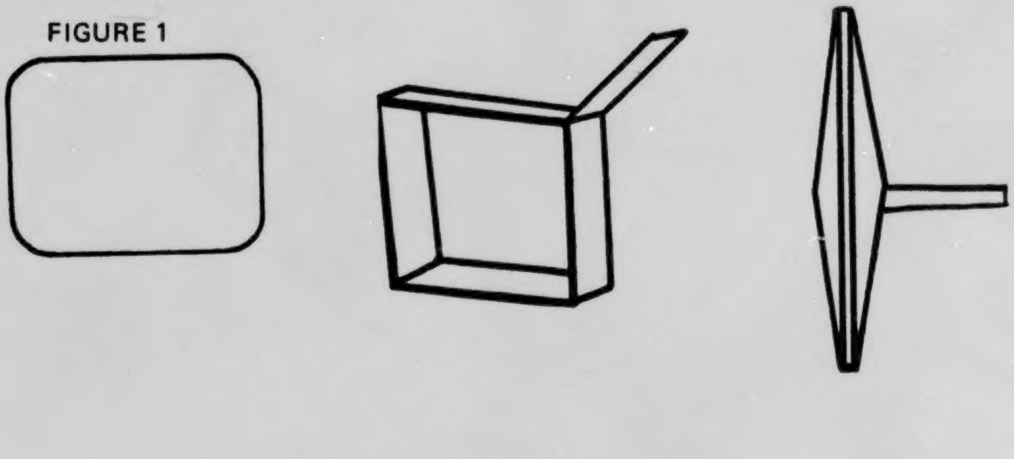
  D. Instruct patient that you are going to take bitewing X-rays

  E. Hand water to patient and ask him or her to rinse mouth

  (NOTE: This is usually done to dislodge any food particles between teeth.)

  F. Slip film through tab with tab end being on white side of film (Figure 1)

FIGURE 1



JOB SHEET #1

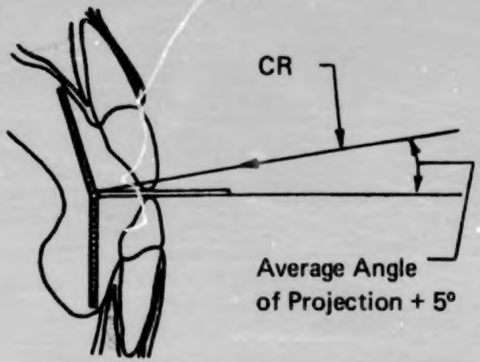
G. Place prepared film tab in patient's mouth with film in lingual part of mouth

H. Ask patient to bite down on tab

(NOTE: If film tab is uncomfortable, bend tab down on buccal side.)

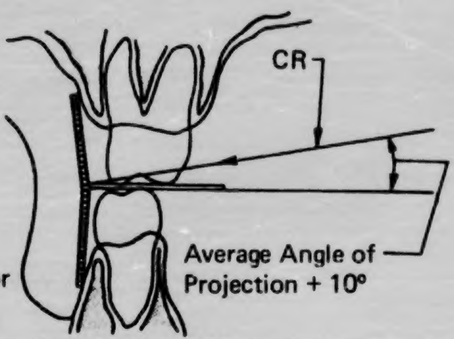
I. Direct cone at edge of tab and toward middle of film packet; usually the vertical angulation is +5° to +10° (Figures 2 and 3)

FIGURE 2



Angle for Projection of Central Ray for Bitewing Radiograph--Anterior

FIGURE 3



Angle for Projection of Central Ray for Bitewing Radiograph--Posterior

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J. Expose film

(NOTE: Use timer exposure recommended on film package.)

K. Remove film and wipe with tissue

L. Label film by using initial of patient's name or number

M. Place film in metal receptacle

N. Repeat exposure procedure on other side of mouth

O. Dismiss patient

ROENTGENOLOGY
UNIT II

JOB SHEET #2--ASSEMBLE XCP (X-Tension Cone Paralleling) INSTRUMENT

I. Materials

   A. Film

   B. Bite block

   C. Indicator rod

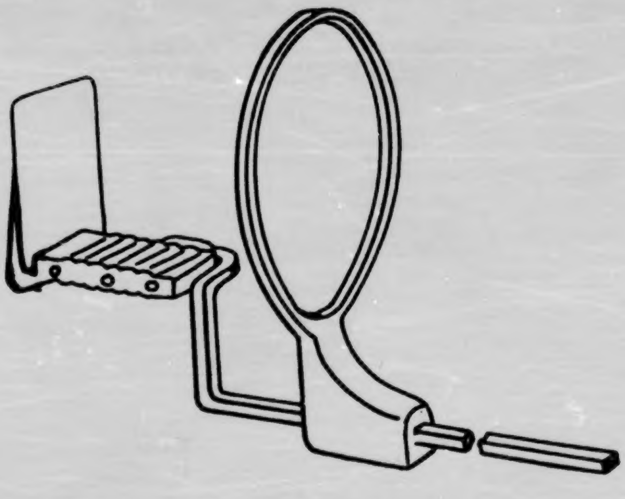
   D. Plastic ring locator

   (NOTE: XCP comes in a kit with anterior and posterior equipment.)

II. Procedure for anterior instrument

   A. Place printed side of film against backing support of biteblock and insert vertically (up and down) into slot by pressing downward; at same time put a slight pressure against backing support to open slot for film (Figure 1)

FIGURE 1



Anterior Instrument

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   B. Hold offset portion of indicator rod away from biting surface of block, and insert pins into proper holes of block

   (NOTE: These are three holes which allow a choice for desired lingual positioning of film.)

   C. Slide plastic locator ring onto indicator rod opposite film packet

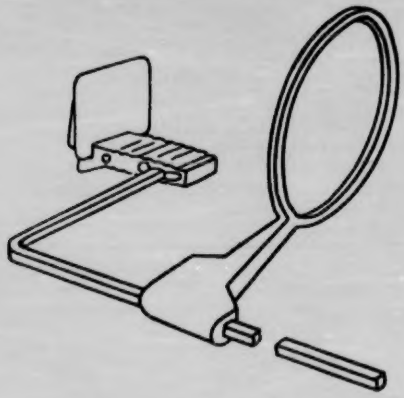
JOB SHEET #2

III. Procedure for posterior instrument

A. Place printed side of film packet against backing support and insert horizontally (level or straight across) into slot by pressing downward; at same time put a slight pressure against backing support to open slot (Figure 2)

B. Hold right-angle portion of indicator rod anterior to block and away from film; insert pins into proper holes (Figure 2)

FIGURE 2



Posterior Instrument

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C. Slide plastic locator ring into indicator rod opposite film packet

ROENTGENOLOGY
UNIT II

JOB SHEET #3--TAKE PERIAPICAL X-RAYS

I. Materials

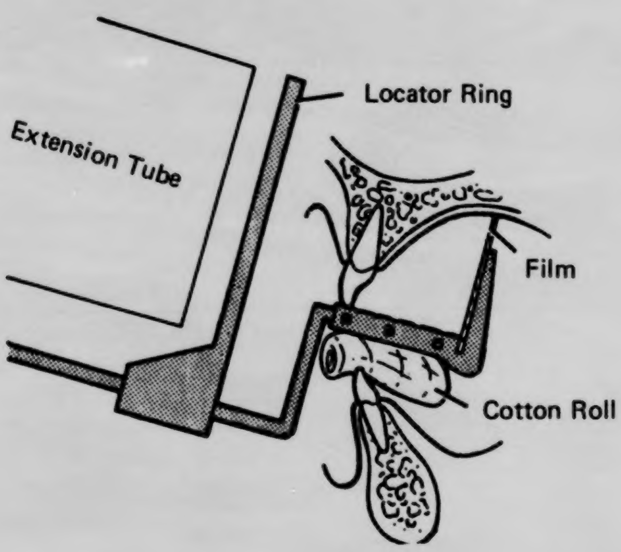
- A. XCP instruments, assembled
- B. Periapical film
- C. X-ray machine
- D. Cotton rolls
- E. Lead apron

II. Procedure for maxillary incisors

- A. Use anterior instrument with film inserted vertically; center with midline and parallel to long axis of incisor teeth
- B. Use entire length of block to position film in region of first molars

  (NOTE: The block will be resting on the incisal edges of teeth to be X-rayed.)
- C. Insert a cotton roll between mandibular incisors and block (Figure 1)

FIGURE 1



JOB SHEET #3

D. Ask patient to close down firmly to hold film in position

E. Slide locator ring down indicator rod to approximately skin surface and align extension tube of X-ray unit with rod and ring on vertical and horizontal planes

F. Expose film using exposure time on film box

III. Procedure for maxillary cuspids

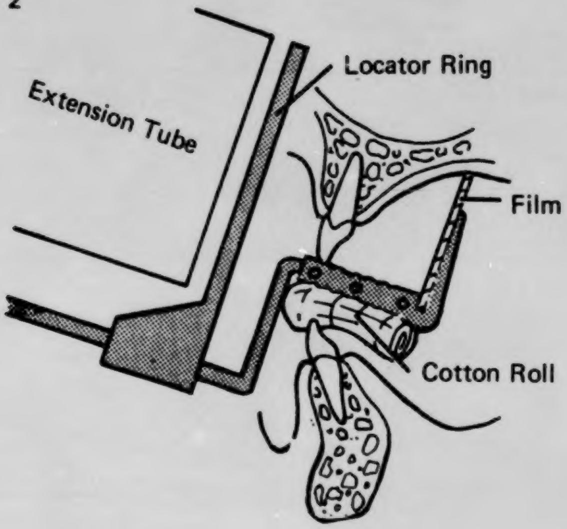
A. Insert film vertically into anterior instrument; center film on cuspid, parallel to long axis of tooth

B. Bend upper anterior corner of film gently to aid in positioning

(NOTE: The block will be resting on the maxillary cuspid tooth.)

C. Insert cotton roll between mandibular teeth and block (Figure 2)

FIGURE 2



D. Ask patient to close down firmly to hold film in position

E. Slide locator ring down indicator rod to approximately skin surface and align extension tube of X-ray unit with rod and ring on vertical and horizontal planes

F. Expose film using exposure time on film box

JOB SHEET #3

IV. Procedure for maxillary bicuspids

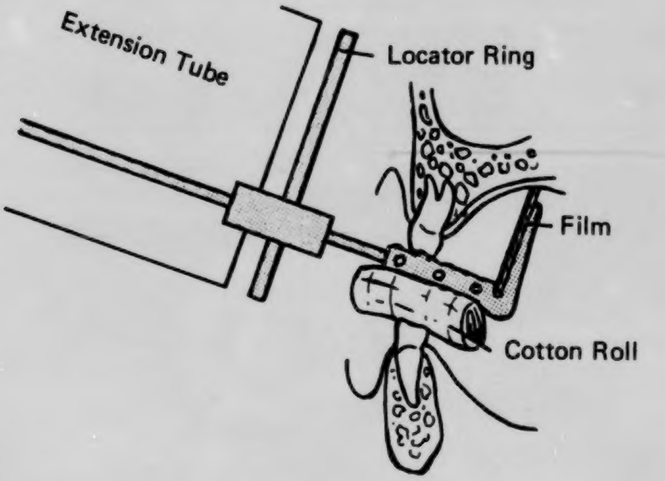
A. Use posterior instrument with film inserted horizontally; position it in mouth with second bicuspid centered on film parallel to long axis of bicuspids

B. Bend upper anterior corner of film to aid in positioning

(NOTE: The block will be held on the occlusal surfaces of the maxillary bicuspids.)

C. Insert a cotton roll between block and mandibular teeth (Figure 3)

FIGURE 3



D. Ask patient to close down firmly to hold film in position

E. Slide locator ring down indicator rod to approximately skin surface and align extension tube of X-ray unit with rod and ring on horizontal and vertical planes

F. Expose film using exposure time on film box

JOB SHEET #3

V. Procedure for maxillary molars

A. Use posterior instrument with film inserted horizontally; position in mouth with anterior edge of film in vicinity of first molar-second bicuspid contact

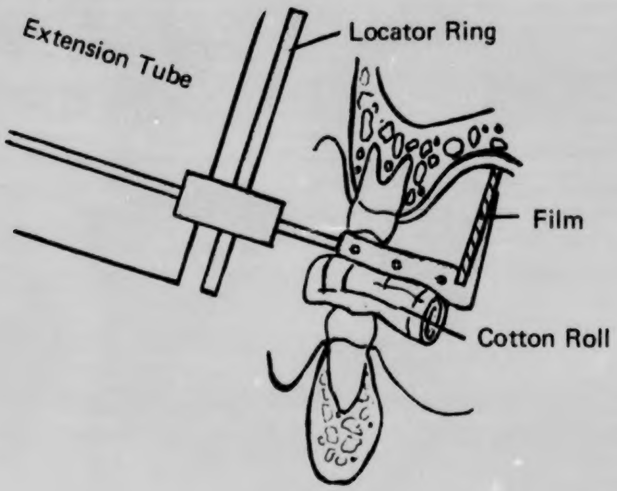
B. Place film parallel with long axis of molars

(NOTE: Lingual placement of film packet to midline of palate will accomplish this relationship.)

C. Place cotton roll between block and opposing teeth

D. Ask patient to close down firmly to hold film in position (Figure 4)

FIGURE 4



E. Slide locator ring down indicator rod to approximately skin surface and align extension tube of X-ray unit with rod and ring on horizontal and vertical planes

F. Expose film using exposure time on film box

JOB SHEET #3

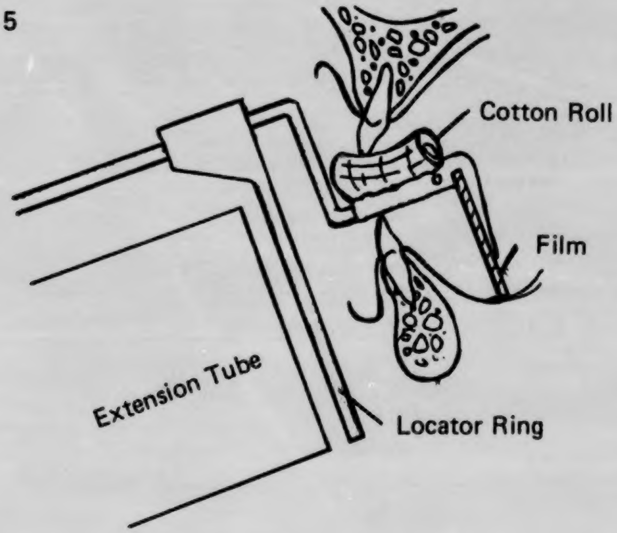
VI. Procedure for mandibular incisors

A. Use anterior instrument assembled with film vertically in bite block; center film with midline, parallel with long axis of incisors

(NOTE: Lingual placement of film packet in region of second bicuspid will accomplish this relationship; the block will be resting on the incisal edges of teeth to be X-rayed.)

B. Insert a cotton roll between top of block and maxillary incisor teeth (Figure 5)

FIGURE 5



C. Ask patient to close down firmly to hold film in position

D. Slide locator ring down indicator rod to approximately skin surface and align extension tube of X-ray unit with rod and ring on vertical and horizontal planes

E. Expose film using exposure time on film box

VII. Procedure for mandibular cuspids

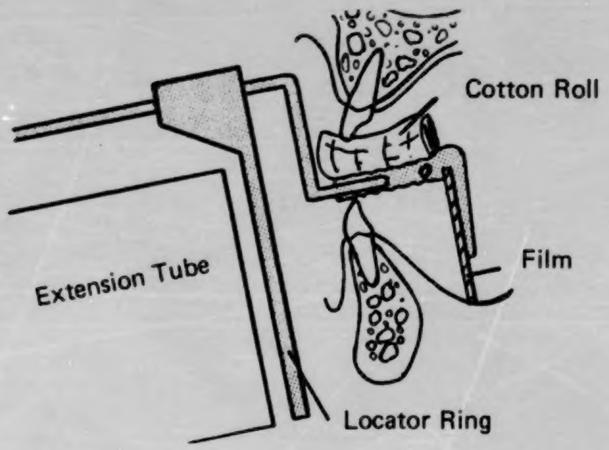
A. Use anterior instrument assembled with film inserted vertically in bite block; center cuspid teeth on film and parallel to long axis of tooth

(NOTE: The block will be resting on the mandibular cuspids.)

JOB SHEET #3

B. Insert a cotton roll between block and maxillary teeth (Figure 6)

FIGURE 6



C. Ask patient to close down firmly to hold film in position

D. Slide locator ring down indicator rod to approximately skin surface and align extension tube of X-ray unit with rod and ring on vertical and horizontal planes

E. Expose film using exposure time on film box

VIII. Procedure for mandibular bicuspids

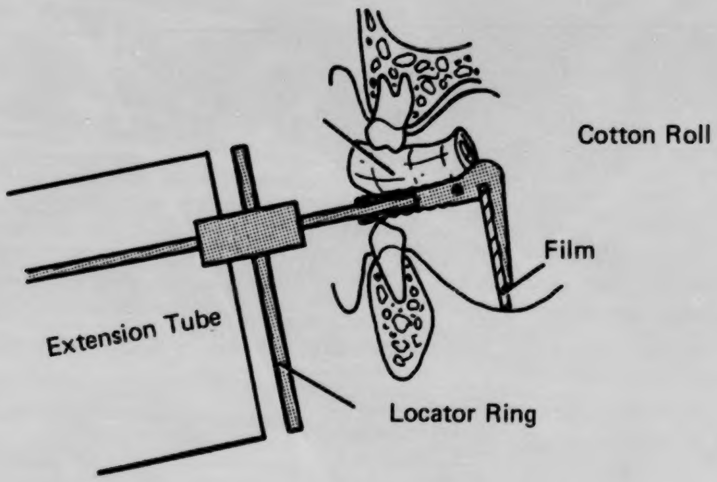
A. Use posterior instrument with film inserted horizontally in block position in mouth; center bicuspids on film and parallel with long axis of bicuspids

(NOTE: A gentle bend of the front lower corner of film packet will aid in positioning. The bite block will be on the occlusal surfaces of the mandibular bicuspids.)

JOB SHEET #3

B. Insert a cotton roll between block and maxillary teeth (Figure 7)

FIGURE 7



C. Ask patient to close down firmly to hold film in position

D. Slide locator ring down indicator rod to approximately skin surface and align extension tube of X-ray unit with rod and ring on horizontal and vertical planes

E. Expose film using exposure time on film box

IX. Procedure for mandibular molars

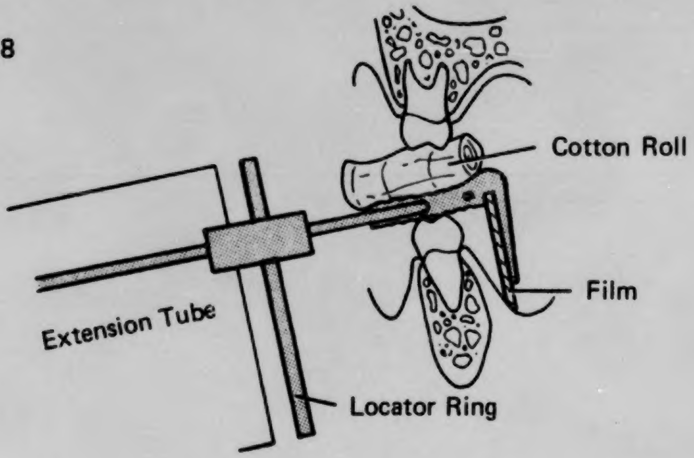
A. Use posterior instrument with film inserted horizontally in mouth; center anterior edge of film in vicinity of first molar-second bicuspid contact; place film parallel with long axis of molar teeth

(NOTE: The occlusal surfaces of molars are usually at right angles to their long axis, so if the block is resting flat across the occlusal surfaces, film is automatically parallel to long axis of tooth.)

JOB SHEET #3

B. Insert a cotton roll between block and maxillary teeth (Figure 8)

FIGURE 8


Cotton Roll
Film
Extension Tube
Locator Ring

C. Ask patient to close down firmly to hold film in position

D. Slide locator ring down indicator rod to approximately skin surface and align extension tube of X-ray unit with rod and ring on horizontal and vertical planes

E. Expose film using exposure time on film box

ROENTGENOLOGY
UNIT II

JOB SHEET #4--DEVELOP FILM

I. Materials

  A. Film

  B. X-ray hangers

  C. Pencil and labels

  D. Interval timer clock

  E. Water thermometer

  F. Safety light

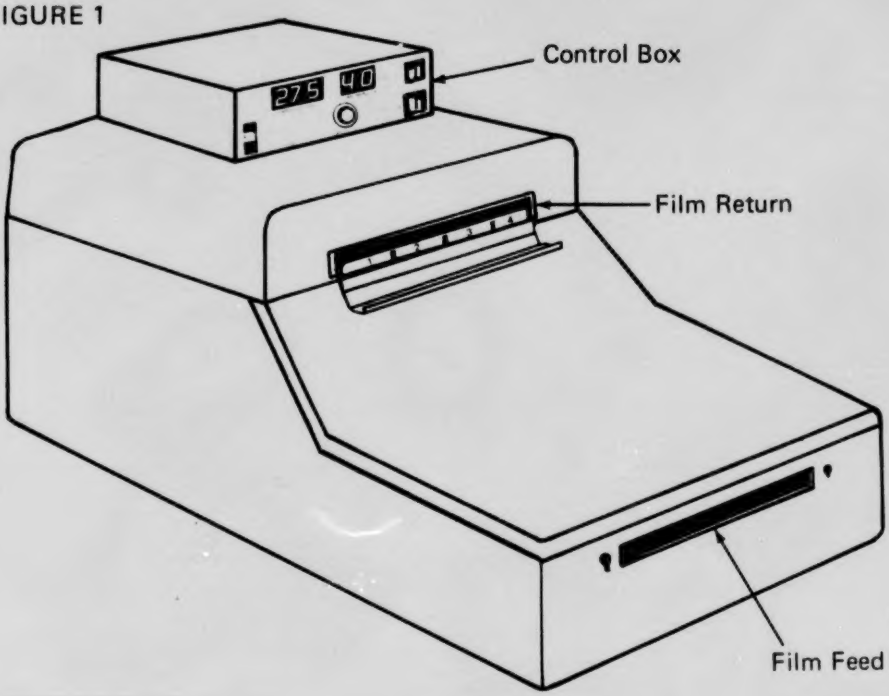
  G. Processing chart

  H. Fan

  I. Stirring rods

  J. Automatic film processor (Figure 1)

FIGURE 1


Control Box
275
40
Film Return
1
2
3
4
Film Feed

JOB SHEET #4

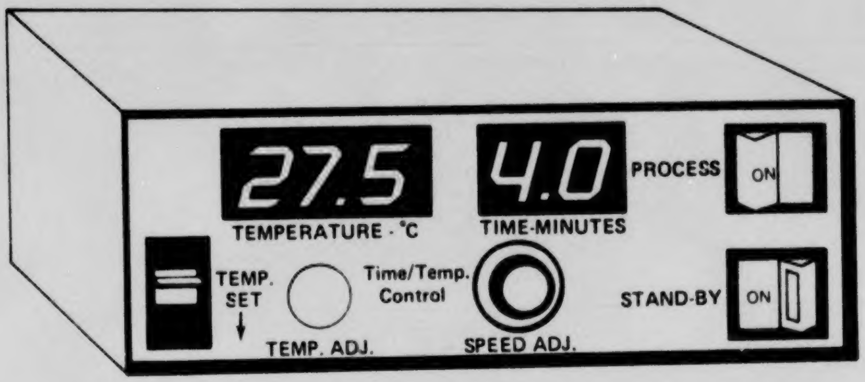
II. Procedure for automatic processing

A. Check to see that fixer solution is in rear tray covering rollers

B. Check to see that developer solution is in front tray covering rollers

C. Turn stand-by switch "on" (Figure 2)

FIGURE 2


27.5
4.0
PROCESS
ON
TEMPERATURE - °C
TIME-MINUTES
TEMP. SET
Time/Temp. Control
STAND-BY
ON
TEMP. ADJ.
SPEED ADJ.

D. Allow approximately 20 minutes for solutions to heat

E. Enter darkroom and turn on utility light

(CAUTION: Always lock door.)

F. Turn process switch "on"

G. Set speed adjust knob according to manufacturer's instructions

H. Feed film, taking care not to overlap film

I. Replace solutions after all film is processed

J. Replace water in recirculator if necessary

III. Procedure for manual processing

A. Enter darkroom and turn on utility light

(CAUTION: Always lock door.)

B. Turn on water to processing unit to begin stabilizing solution temperatures

JOB SHEET #4

C. Check solution levels

(NOTE: This can be done by inserting a hanger you do not plan to use or by using marker on the tank.)

D. Stir developer and fixer thoroughly, using a different rod for each solution (Figure 3)

(CAUTION: Stir gently, as solution will make dark stains on your uniform.)

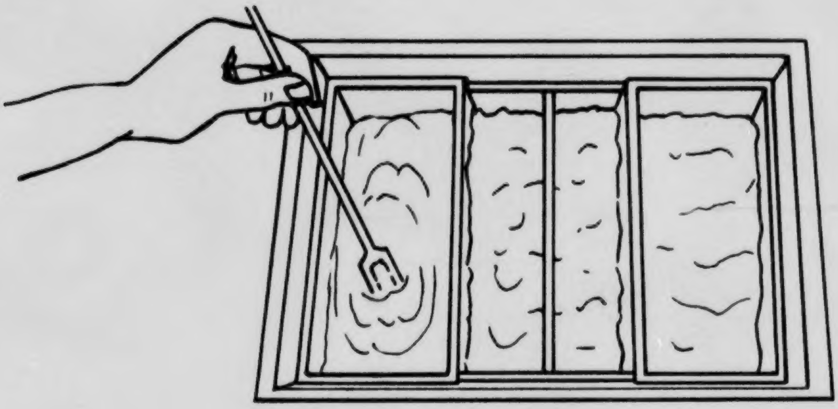


FIGURE 3

E. Check temperature with water thermometer

1. Rinse thermometer before checking different solutions
2. Adjust temperature to 68°-70°F if possible

F. Label hanger with name, date, and number of film

G. Turn on safety light

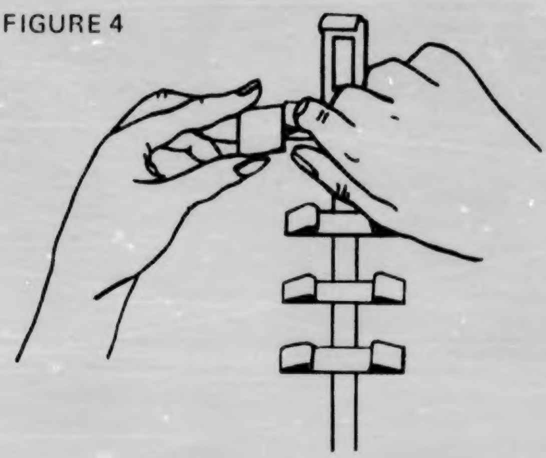
H. Turn off utility light

I. Remove film from packet

JOB SHEET #4

J. Clip film on hanger using one film to a clip (Figure 4)

FIGURE 4



K. Consult time and temperature chart for a recommended developing time (Figure 5)

FIGURE 5

DEVELOPMENT	TIME
TEMP.	MIN.
60°-62°F	9
64°-66°F	7
68°-70°F	5
RECOMMENDED	
72°-76°F	4
78°-80°F	3

L. Set timer

M. Completely immerse film in developer

N. Start timer

JOB SHEET #4

O. Agitate film immediately by raising and lowering film several times so that film surfaces are thoroughly bathed (Figure 6)

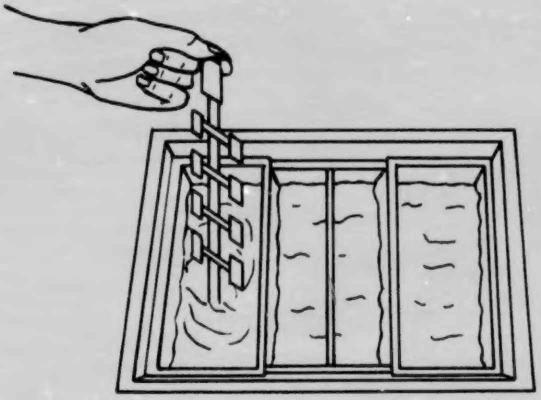


FIGURE 6

P. Remove hanger from developer when bell rings and let drain for a moment

Q. Place film in rinsing section with running water for twenty seconds; then lift from rinse and let drain for just a second

R. Place film in fixer solution, and agitate hanger vigorously; check manufacturer's instructions for specific fixing times

S. Place film in washing compartment and wash for at least twenty minutes in running water

T. Place hanger on drying rack

U. Turn on fan to help dry film

(NOTE: After film is dry, remove and mount.)

V. Wipe up all spilled or dripped solution

W. Wash hangers after each use

ROENTGENOLOGY
UNIT II

TEST

NAME____ SCORE__________________

1. Match terms associated with roentgenology to their definitions. Write the correct numbers in the blanks provided.

_____a. Instrument for measuring voltage or electromagnetic force

_____b. Parallel with floor

_____c. Line at right angle to another line or surface

_____d. Radiation equivalent in human beings

_____e. Any one of several techniques for making X-rays of all teeth and structures on one film

_____f. Taking pictures of internal body structures by passing X-rays through body to act on sensitized film

_____g. Lines that never cross

_____h. Instrument used for positioning X-rays

_____i. Tissue or material that allows some or all X-rays to pass through

_____j. One one-thousandth of a meter

_____k. Tissue or material that is resistant to passage of X-rays

_____l. Straight up and down

_____m. Gauge that records electric current in milliamperes

_____n. Scientific study of diagnostic and therapeutic use of X-rays

_____o. Radiant energy of short wave length discovered by Conrad Roentgen

1. Roentgenology
2. Roentgenography
3. Roentgen ray
4. Panoramic
5. Radiopaque
6. Radiolucent
7. Rem
8. Voltmeter
9. Millimeter (mm)
10. Milliammeter
11. Parallel
12. Horizontal
13. Vertical
14. Perpendicular
15. X-Tension Cone Paralleling Instrument

2. State the purposes of X-rays.

   a. ____

   ____

   b. ____

   ____

3. Distinguish between intraoral and extraoral film. Write an "I" to show intraoral film and an "E" to show extraoral film.

   ______a. Used inside mouth

   ______b. Used outside mouth

4. Match types of intraoral film to their uses. Write the correct numbers in the blanks provided.

   ______a. Used to view crown portion of posterior teeth

   ______b. Used to obtain periapical radiographs of children or adult with a very small mouth

   ______c. Used to view crowns, roots, and supporting structures of teeth

   ______d. Used to view maxillary and mandibular arch when fractures or gross pathological conditions are suspected

   1. Periapical
   2. Bitewing (interproximal)
   3. Occlusal
   4. Pedodontic (pedo)

5. Describe characteristics of extraoral film.

   a. ____

   b. ____

   c. ____

   d. ____

6. Select from the list below characteristics of dental film. Mark each correct answer with an "X."

   ______a. Must be used quickly

   ______b. Coated with emulsion of silver halide in gelatin

   ______c. Made from cotton fibers embedded in a strip of cellulose acetate

   ______d. Flawed if contains an indentation

   ______e. Appears transparent when opened

   ______f. Given a blue tint to prevent eyestrain while viewing

7. List types of film speed.

   a. ______________________________

   b. ______________________________

8. Distinguish between film requirements for full mouth X-rays of adults and children. Write an "A" to show film requirements for adults and a "C" to show film requirements for children.

   ______a. Ten periapical and two bitewing

   ______b. Fourteen periapical and two bitewing

9. Describe proper film storage.

   a. Reserve film--______________________________

   b. Currently used film--______________________________

   c. Exposed film--______________________________

10. Select from the list below types of X-ray equipment. Mark each correct answer with an "X."

    ______a. Voltmeter

    ______b. Cephalograph

    ______c. Panorex (panoramic)

    ______d. Standard intraoral

    ______e. Orthopantomograph

    ______f. Enlarger

11. Arrange in order steps to take during X-ray exposure. Write a "1" to show the first step, a "2" to show the second step, and so on.

    ______a. Position tube

    ______b. Check voltmeter

    ______c. Observe milliammeter constantly during exposure

    ______d. Allow timer to count off seconds

    ______e. Place film

    ______f. Turn on switch

    ______g. Turn dial counterclockwise to set timer for desired number of seconds for particular exposure

    ______h. Press release button to make exposure

12. Match facial landmarks associated with roentgenology to their descriptions. Write the correct numbers in the blanks provided.

_____a. Tissue located anterior and toward middle of opening for ear

_____b. Lower margin of jaw

_____c. Junction of eyelids at outer corner of eye

_____d. Imaginary line drawn from chin through central teeth and up through nose

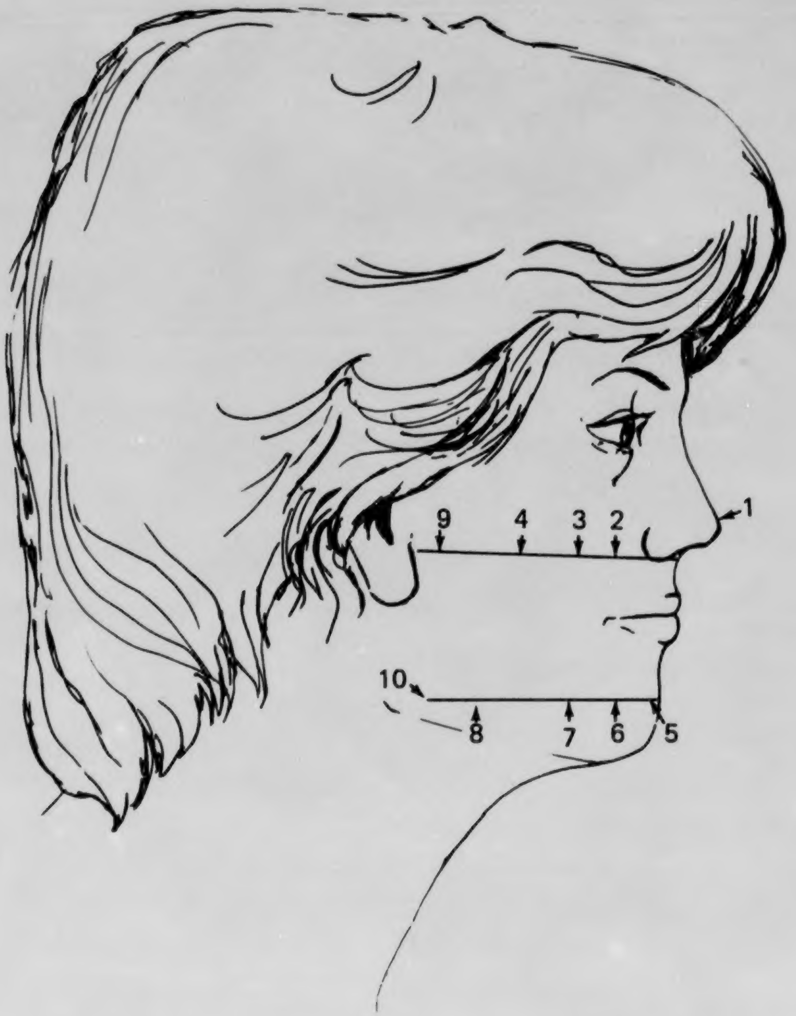
_____e. Winged flare of nostril as it meets cheek

_____f. Bony (molar) process forming outer margin of cheek

_____g. Imaginary line drawn from ala of nostril to middle of opening for ear (tragus)

1. Ala-tragus line (Frankfort plane)
2. Ala
3. Border of mandible
4. Canthus of eye
5. Zygoma
6. Tragus
7. Midsagittal

13. Identify the periapical X-ray landmarks shown below. Write the correct numbers in the blanks provided.



_____a. Mandibular bicuspids

_____b. Tragus of ear to ala of nose

_____c. Maxillary bicuspids

_____d. Border of mandible

_____e. Mandibular cuspids

_____f. Maxillary cuspids

_____g. Maxillary molars

_____h. Maxillary incisors

_____i. Mandibular molars

_____j. Mandibular incisors

14. Distinguish between vertical and horizontal angulation. Write a "V" to show vertical angulation and an "H" to show horizontal angulation.

_____a. X-ray will show distal tooth overlapping on mesial if focus is too distal

_____b. Starts at neutral 0° on a 360° circle

_____c. Focus cone opening upward or downward with head of the unit constant on same spot

_____d. Shows accurate size of tooth

_____e. Focus cone forward toward patient with head only moved on circle parallel to floor

_____f. Starts at contact points between teeth

_____g. Shows adjacent tooth structure in true form (not overlapped)

15. Distinguish between foreshortened and elongated images. Write an "F" to show foreshortened images and an "E" to show elongated images.

_____a. Image of tooth appears shorter than actual size

_____b. Image of tooth appears longer than actual size

_____c. Caused by too little angulation

_____d. Caused by too much angulation

16. File dental X-rays.

17. Demonstrate the ability to:

    a. Take bitewing X-rays.

    b. Assemble XCP (X-Tension Cone Paralleling) instrument.

    c. Take periapical X-rays.

    d. Develop film.

    (NOTE: If activities 16 and 17 have not been finished before the test, ask your instructor when they should be completed.)

ROENTGENOLOGY
UNIT II

ANSWERS TO TEST

1. a. 8
   b. 12
   c. 14
   d. 7
   e. 4
   f. 2
   g. 11
   h. 15
   i. 6
   j. 9
   k. 5
   l. 13
   m. 10
   n. 1
   o. 3

2. a. Assist dentist in determining condition of teeth and surrounding structures
   b. Aid in preventive care

3. a. I
   b. E

4. a. 2
   b. 4
   c. 1
   d. 3

5. Description should include:
   a. Used for examination of facial bones, jaws, and TMJ (temporomandibular joint) articulation
   b. Supplied in sheets
   c. Must be placed in film holder in total darkness
   d. Obtained in sizes 5 x 7, 8 x 10, and 10 x 12

6. b, c, f

7. a. Regular (radiatized)
   b. Ultra-speed

8. a. C

    b. A

9. Descriptions should include:

    a. Store in cool, dark place

    b. Store in lead dispenser

    c. Store in lead receptacle

10. c, d, e

11. a. 5 e. 4

    b. 2 f. 1

    c. 8 g. 3

    d. 7 h. 6

12. a. 6 e. 2

    b. 3 f. 5

    c. 4 g. 1

    d. 7

13. a. 7 f. 2

    b. 9 g. 4

    c. 3 h. 1

    d. 10 i. 8

    e. 6 j. 5

14. a. H e. H

    b. V f. H

    c. V g. H

    d. V

15. a. F c. E

    b. E d. F

16. Evaluated to satisfaction of instructor

17. Performance skills evaluated to satisfaction of instructor

SECRETARIAL PROCEDURES
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to perform all necessary secretarial duties in the dental office. This knowledge will be evidenced through completion of assignment sheets, job sheet, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with secretarial procedures to the correct definitions.
2. Select from a list duties of the business office assistant.
3. Select from a list qualities of a good telephone manner.
4. Describe factors that contribute to the success of a professional call.
5. Describe procedures for different types of appointments.
6. Select from a list necessary information for the appointment book.
7. List requirements for appointment book entries.
8. Arrange in order proper sequence for making appointments.
9. Select from a list purposes of confirming appointments.
10. Match types of files to their systems.
11. Select from a list types of filing systems used in the dental office.
12. State rules for filing alphabetically by indexing.
13. Match parts of a numeric filing system to their descriptions.
14. Distinguish between types of dental supplies.
15. Describe methods of controlling supplies.
16. Arrange in order steps for verifying supplies.

17. Match terms associated with letter writing to their definitions.
18. Label styles of letters.
19. Match types of complimentary closes to the degree of their formality.
20. Describe points to remember when transcribing a letter.
21. Practice correct word usage.
22. Fill in appointment cards.
23. Type correct words for your letter.
24. Type prefixes, root words, and suffixes.
25. Index and type names.
26. Compose a business letter.
27. Care for incoming mail.
28. Maintain a want list.
29. Order supplies.
30. Demonstrate the ability to operate a transcriber.

SECRETARIAL PROCEDURES
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

A. Provide student with objective sheet.

B. Provide student with information, assignment and job sheets.

C. Order film.

D. Make transparencies.

E. Discuss unit and specific objectives.

F. Discuss information, assignment and job sheets.

G. Order "Progressive Filing Practice Set" for students to use for additional practice.

Progressive Filing. Kahn, Yerian, Stewart, 8th ed., Gregg Division: McGraw-Hill Book Company.

(NOTE: This is an excellent book on filing which includes a complete practice set with cards. Rules 19 and 20 may be too difficult to cover at this level.)

H. Contact the telephone company for a practice set of telephones to be used in the classroom.

I. If possible, have print shop make up health records, appointment cards, ledgers, or any other needed forms.

J. Make an appointment with telephone representative to demonstrate telephone procedures to class.

K. Ask a physician to compose some patient referrals on cassette tapes for students to practice typing letters using the dictaphone.

(NOTE: If this cannot be accomplished, compose some yourself.)

L. Provide or dictate sample letters for use with Assignment Sheet #6.

M. Discuss and assist with procedures outlined in assignment and job sheets.

N. Give test.

II. Instructional materials:

- A. Objective sheet
- B. Information sheet
- C. Transparency masters
    1. TM #1--Cross-referencing Married Women's Names
    2. TM #2--Transcriber with Foot Control
    3. TM #3--Transcribing
    4. TM #4--Leaving Telephone Unattended
    5. TM #5--Indexing Personal Names
    6. TM #6--Margins - Elite and Pica
    7. TM #7--Letter Styles
    8. TM #8--Parts of a Letter
- D. Assignment sheets
    1. Assignment Sheet #1--Practice Correct Word Usage
    2. Assignment Sheet #2--Fill in Appointment Cards
    3. Assignment Sheet #3--Type Correct Words For Your Letter
    4. Assignment Sheet #4--Type Prefixes, Root Words, and Suffixes
    5. Assignment Sheet #5--Index and Type Names
    6. Assignment Sheet #6--Compose a Business Letter
    7. Assignment Sheet #7--Care For Incoming Mail
    8. Assignment Sheet #8--Maintain a Want List
    9. Assignment Sheet #9--Order Supplies
- E. Job Sheet #1--Operate a Transcriber
- F. Test
- G. Answers to test

III. Unit references:

A. Ehrlich, Ann. *Business Administration for the Dental Assistant.* 2nd edition. Champaign: Colwell Systems, Inc., 1972.

B. Kahn, Yerian, Stewart. *Progressive Filing.* 8th ed., Gregg Division: McGraw-Hill Book Company, 1969.

C. Ladley, Betty A., and Patt, Jerry Crowe. *Office Procedures for the Dental Team.* Saint Louis: C.V. Mosby Company, 1977.

D. Carpenter, Corinne K. *Workbook for Dental Records.* New Brunswick: Rutgers University, Curriculum Laboratory, 1972.

IV. Film--"Telephone Manners." 14 min., color, 1975. Available from State Department of Vocation and Technical Education/Curriculum and Instructional Materials Center, 1515 W. 6th Ave., Stillwater, OK 74074.

(NOTE: This film is also available in a shorter 10-minute version.)

SECRETARIAL PROCEDURES
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Personal name--Legal name of a person, whether it is usually used as an individual name or as a part of a business name

B. Surname--Person's last name

C. Given name--First name or initial of a person and a middle name or an initial

D. Full name--Surname and at least one given name or initial of a person

E. Natural order--Order in which a full name normally appears

F. Indexing--Process of dividing names into units for the purpose of selecting the caption under which a record is to be filed

G. Indexing arrangement--Order in which the units of a name are arranged for filing

H. Indexing unit--Part of a name that is used in arranging alphabetically

I. Coding--Process of marking the indexing units in a name to indicate the order in which the units will be filed

J. Alphabetizing--Arrangement of single letters or words according to the alphabet

K. Filing--Systematic, orderly arrangement and storage of letters, invoices, statements, catalogs, etc.

L. Numerical filing--Assigning consecutive numbers to each correspondent or name that warrants an individual folder

M. Credit s[illegible]--Balance in a person's favor on an account

N. Running inventory--Accurate list of supplies needed

O. Cross-reference--Notation in the index showing that the record is filed somewhere else (Transparency 1)

P. Salutation--An expression of greeting

(NOTE: In a business letter the salutation is always blocked at the left margin and preceded and followed by one blank line.)

INFORMATION SHEET

II. Duties of the business office assistant

(NOTE: This is just a partial list.)

- A. Greets patients
- B. Uses telephone efficiently (Assignment Sheet #1)
- C. Makes appointments (Assignment Sheet #2)
- D. Confirms patients' appointments
- E. Types letters (Assignment Sheets #4 - #6)

  Examples: Referrals, medical/dental history, collections
- F. Opens, reads and sorts incoming mail (Assignment Sheet #7)
- G. Files records, orders supplies (Assignment Sheets #8 and #9)
- H. Transcribes letters and dental health reports (Transparencies 2 and 3)

III. Qualities of good telephone manner

- A. Pleasantness
- B. Promptness
- C. Showing interest in caller
- D. Politeness
- E. Helpfulness

  (NOTE: If you are working in a one-telephone-line office, try to space your outgoing calls so that incoming calls can get through.)

IV. Factors that contribute to the success of a professional call (Assignment Sheet #1)

- A. Choice of words
  1. Give clear explanations
  2. Avoid slang expressions
  3. Use short, simple, descriptive words
  4. Use expressions of courtesy
  5. Use person's name often

  (NOTE: Repeat important information to make sure patient understands it.)

INFORMATION SHEET

B. Tone of voice

1. Speak directly into mouthpiece
2. Use normal conversational tone
3. Speak clearly and distinctly
4. Say it with a smile

C. Closure of conversation

1. Use courtesy

Example: "Thank you for calling, Lynn."

2. Hang up gently

(NOTE: Never drop receiver or slam it down; this is the same as closing the door in a patient's face. Use the hold button on the telephone if you need to discontinue the conversation for a short period of time. If there is no hold button, lay the receiver on the desk or hang it on the side of the phone. See Transparency 4.)

V. Procedures for different types of appointments

A. New patient

1. Usually appointed for examination for an hour
2. Indicated in red pencil in appointment book

Examples: New circled in red by name, red "X" by name

B. Recall appointment

1. Appoints patient for dental examination if bitewing X-rays show problems
2. If X-rays are normal, calls patient to inform him or her there is no dental work needed, and we will see you in six months

C. Emergency patient

1. Appoint patient during reserved emergency time

(NOTE: If reserved emergency time is filled, proceed as follows.)

INFORMATION SHEET

2. Choose the best time you can from the schedule

   (NOTE: If it is an acute emergency, ask patient to come in to the office. Explain to other patients that there will be a delay, then proceed with emergency treatment.)

D. Courtesy service

   (NOTE: This is where another dentist will ask your office to care for patients during his or her absence.)

   1. Explain to courtesy patient you work by appointments

   2. Give patient appointment as you would an emergency patient

E. Sales representative

   1. Appoint sales representative as your office advises

   2. Use emergency time, and have order ready for review

F. School children--Appoint after school or on school holidays

VI. Necessary information for appointment book

   A. Patient's full name

      (NOTE: The reason for using the full name is not to confuse patient with another whose name is very similar.)

   B. Telephone number

      (NOTE: This is used to reach patient for necessary change in appointments or for reminder. Write *Mr., Mrs.,* or *Miss* beside names of adults to distinguish them from children.)

   C. Time of appointment

   D. Length or purpose of appointment

      (NOTE: This will help you determine how much time to leave for the appointment.)

VII. Requirements for appointment book entries

   A. Accurate

   B. Legible

   C. Complete

   D. In pencil

INFORMATION SHEET

VIII. Proper sequence for making appointments

A. Complete entry in pencil in units of time

Example: Patient's first and last name, age, and daytime phone number--if it is a new patient

B. Write appointment card for patient

C. Double-check appointment card and appointment book

(NOTE: Unless this sequence is followed you could make out the appointment card and not enter patient. Then at appointment time, you could end up with two patients scheduled at the same time.)

IX. Purposes of confirming appointments

(NOTE: The best time to confirm appointments is the day before the patient's appointment time.)

A. Acts as courtesy reminder for patient

B. Catches cancellations in time to reappoint

(NOTE: It is most important to erase cancelled names from appointment schedules.)

Example: Call another patient you have on a call list

C. Saves loss of chair time for doctor

X. Types of files and their systems

A. Patient's record files--Kept together in a file folder or envelope and filed alphabetically or numerically

(NOTE: Patients' record files usually consist of dental charts, case history, financial records, insurance forms and correspondence.)

B. Business record file-Maintained in a subject file

C. Recall file--Card file organized alphabetically and color-coded by month

D. Radiography file--Kept alphabetically or in patient's record file

E. Come-up file--Filed chronologically by month

(NOTE: This is usually a file of things to do at a certain time of the month.)

Examples: Birthday cards, equipment maintenance

INFORMATION SHEET

XI. Types of filing systems used in the dental office

A. Subject

B. Numeric

C. Chronologic

D. Alphabetic

(NOTE: This system is arranged from A to Z. It is used for about 90% of all filing done in a dental office.)

XII. Rules for filing alphabetically by indexing (Transparency 5, Assignment Sheet #5)

A. Individuals' names are indexed with last name (surname) first

B. Last name is followed by first name (given name)

C. First name is followed by middle name or initial

D. "Nothing comes before something"-surnames with initial come before surnames with a first name

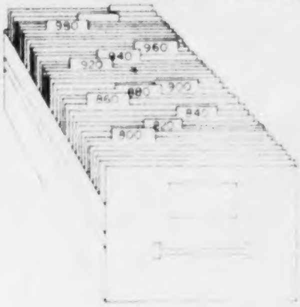
(NOTE: The following examples will show how names should be indexed and arranged in the file cabinet or shelf.)

Examples:

Name	1	2	3
Dorothy Bates	Bates	Dorothy	
Deanne Butts	Butts	Deanne	Norma
Genevieve Garrett	Garrett	Genevieve	
Frances Henderson	Henderson	Frances	Jane

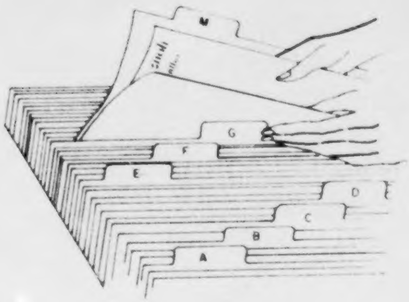
XIII. Parts of a numeric filing system

A. Main numeric file--Contains individual folders with numeric captions



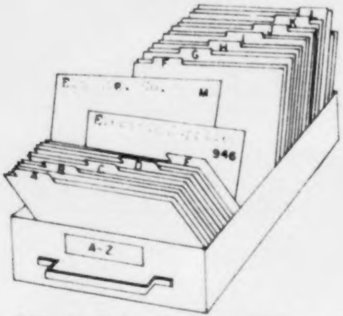
INFORMATION SHEET

B. Miscellaneous alphabetic file--Contains miscellaneous folders with alphabetic captions



From *Progressive Filing* by Kahn, Yerian, and Stewart. Copyright 1969 by McGraw-Hill Book Company. Used with permission of McGraw-Hill Book Company.

C. Card index--Contains names or subjects that are arranged alphabetically



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XIV. Types of dental supplies

A. Expendable--Items that are consumed or used up in services

Example: Local anesthesia

B. Nonexpendable--Reusable items that are not of major cost

Example: Instruments

C. Capital supplies--Costly items that are seldom replaced

Examples: Dental unit, X-ray machine

INFORMATION SHEET

XV. Methods of controlling supplies

- A. Check supplies off check list as used

  (NOTE: Most offices have a list of supplies on hand posted in the laboratory cabinet.)

- B. Use want list to record supplies needed

  (NOTE: This is a list that can be posted in laboratory for items you will need to order. Your doctor will indicate the supply level to maintain.)

XVI. Verifying supplies

- A. Open supplies upon arrival
- B. Check supplies received against invoice
- C. File invoice

  (NOTE: You may receive a credit slip if all supplies are not available. If so, file with invoice and be sure to get credit.)

- D. File back order slip

XVII. Terms associated with letter writing (Transparency 8)

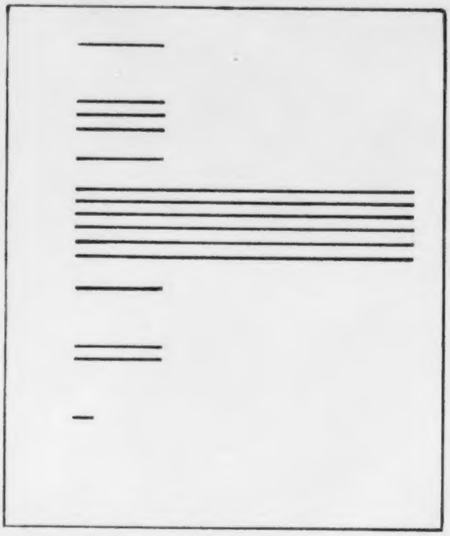
- A. Letterhead--Firm's name, address, telephone number, and/or symbol identifying nature of business; usually appears at top of stationery
- B. Date line--Month, day of the month, and year
- C. Inside address--Name, address, and company of the person to whom the letter is written
- D. Salutation--Opening greeting of the letter
- E. Body--All the material between the salutation and the complimentary close; the message
- F. Complimentary close--"Good-bye" of the letter
- G. Signer's identification line--Typed name and title of the person who signs the letter
- H. Reference line--Notation regarding a file reference

  Examples: Purchase orders, invoices

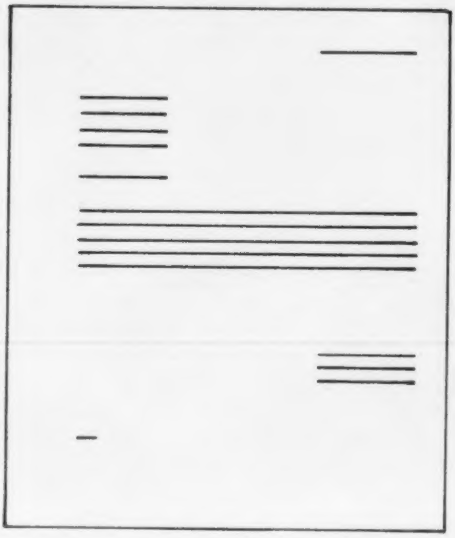
INFORMATION SHEET

XVIII. Styles of letters (Transparencies 6 and 7)

A. Blocked

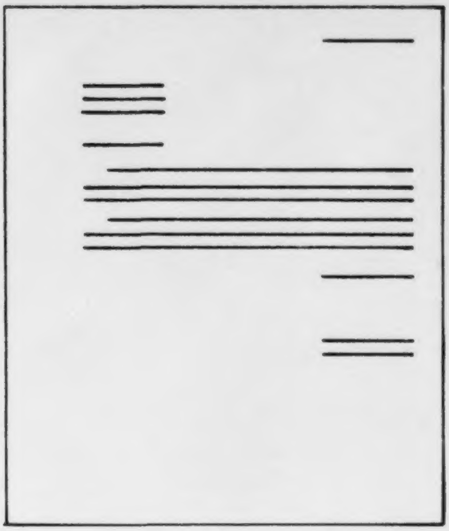


B. Modified block; open punctuation

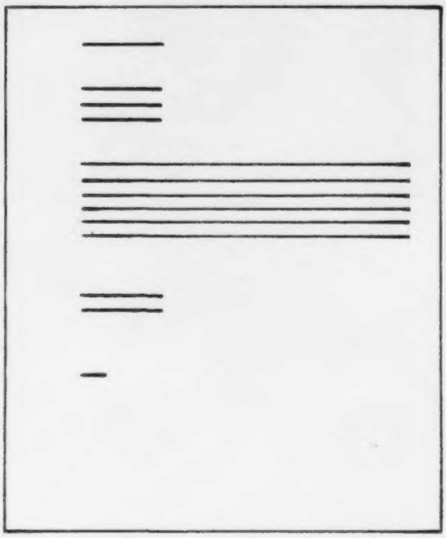


INFORMATION SHEET

C. Modified block (indented), with mixed or standard punctuation



D. AMS (Administrative Management Society) simplified



INFORMATION SHEET

XIX. Complimentary closes and their degree of formality

A. To show great respect--Respectfully yours, yours respectfully, very respectfully yours, yours very respectfully

B. Formal--Yours very truly, very truly yours

C. Somewhat less formal--Sincerely yours, yours sincerely, yours very sincerely, very sincerely yours

(NOTE: This group of closings is preferred in most cases.)

D. More personal and friendly--Cordially yours, yours cordially, yours very cordially, very cordially yours

XX. Points to remember when transcribing a letter

A. Carefully review all instructions before typing

B. Type only what you clearly understand. When in doubt, ask. You'll save time and retyping

C. Return dictation marked "rush" as it is transcribed. Be sure to include attachments, enclosures, and specified number of copies

D. Use correspondence folders for proper handling of all correspondence materials

E. Erase cassettes only after typed material has been checked and signed by the originator

F. Make certain the originator has a sufficient supply of cassettes; Avoid work pile-ups--keep things moving rapidly and efficiently

G. Type envelope with same address inside address of letter

H. Check to make sure enclosures have been included along with letter

Examples: Forms, checks

Cross-Referencing Married Women's Names

Lakewood, Marilyn Ann (Mrs.)

Mrs. Terence Lakewood
6409 Star Ave.
Perry, OK 70001

Original Card

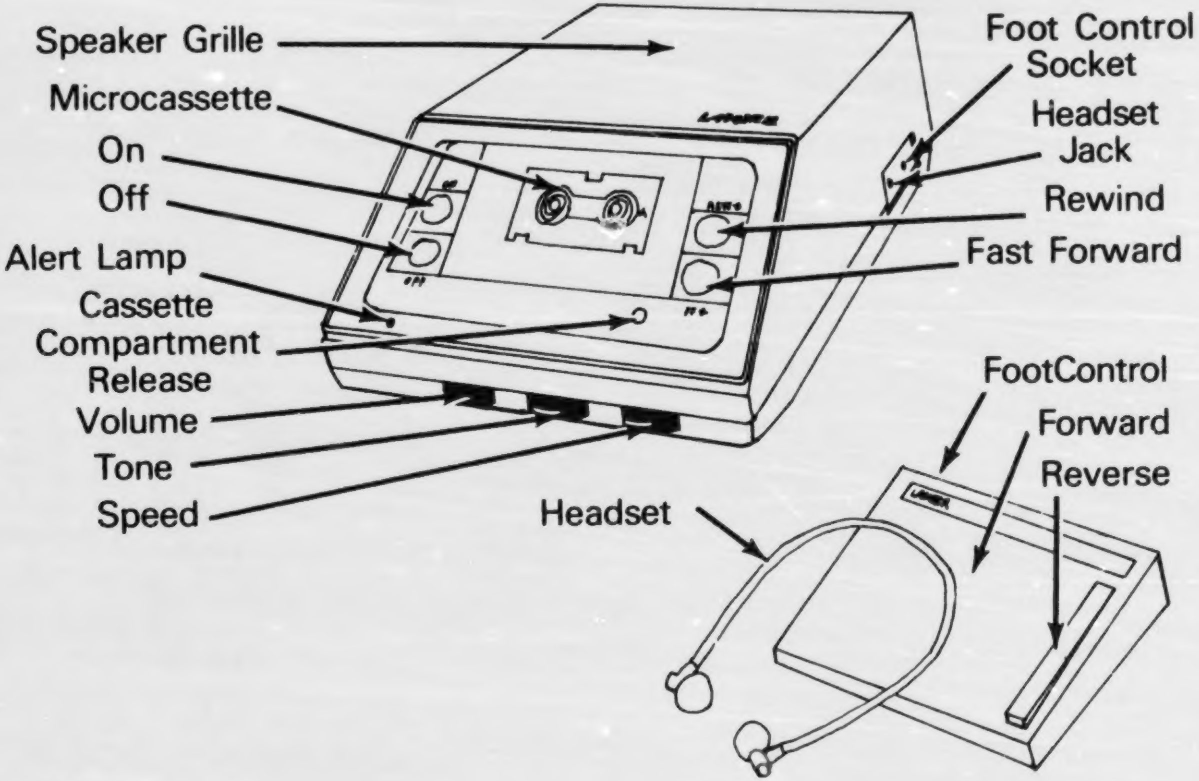
Cross-Reference Card

Lakewood ,Terence (Mrs.)

6409 Star Ave.
Perry, OK 70001

Lakewood, Marilyn Ann (Mrs.)

Transcriber With Foot Control


Speaker Grille
Microcassette
On
Off
Alert Lamp
Cassette Compartment Release
Volume
Tone
Speed
Foot Control Socket
Headset Jack
Rewind
Fast Forward
FootControl
Forward
Reverse
Headset

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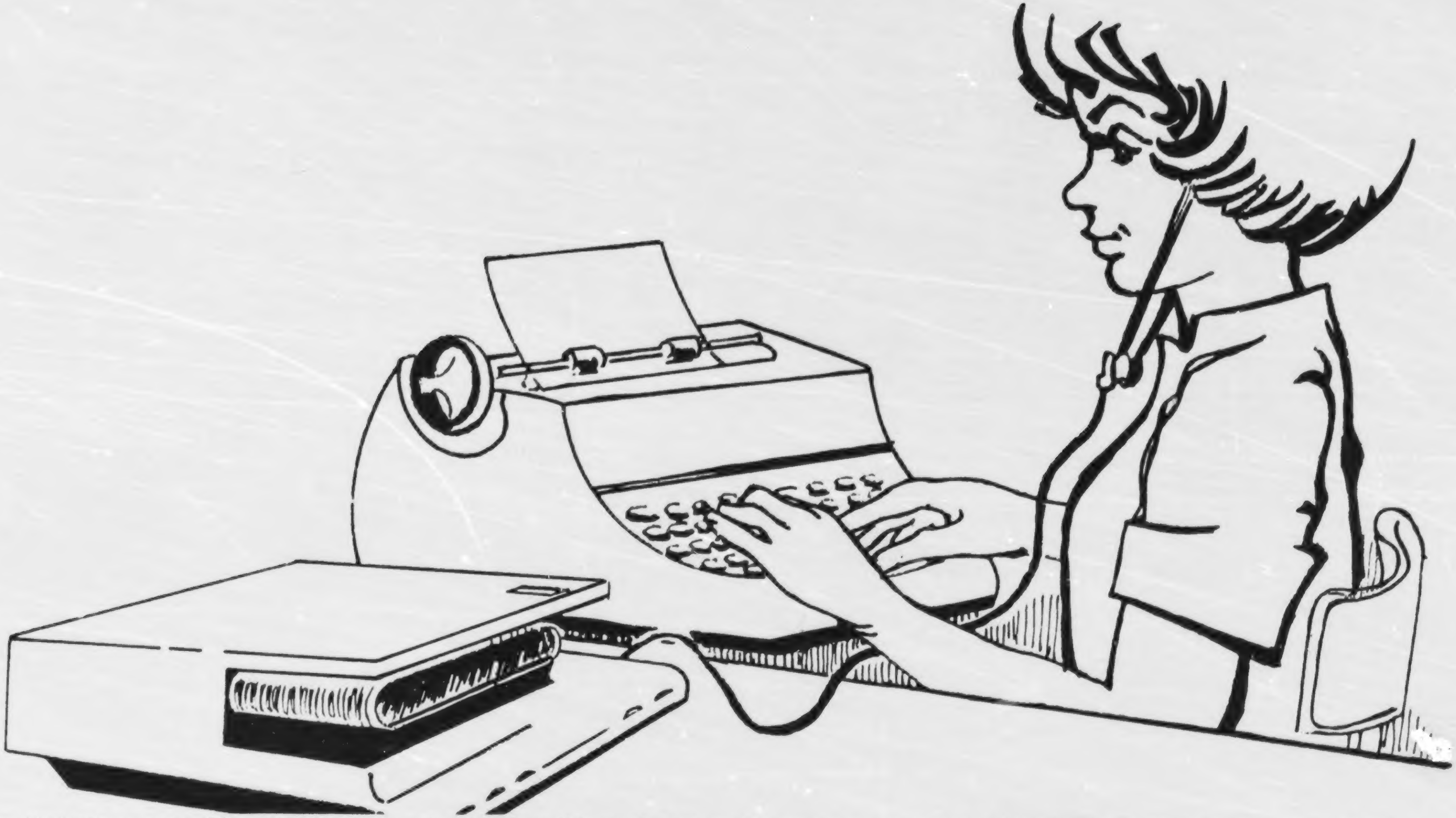
Transcribing



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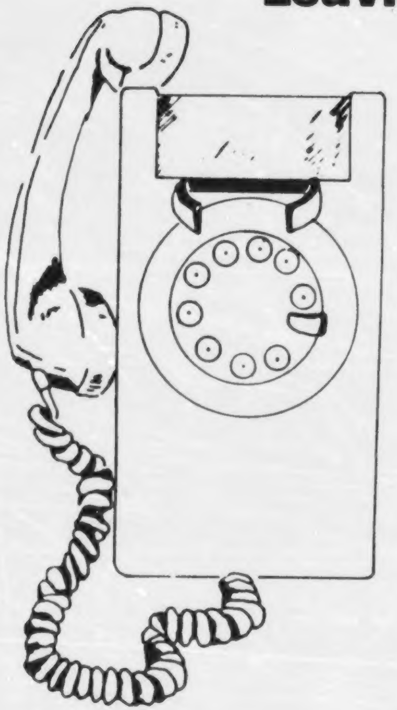
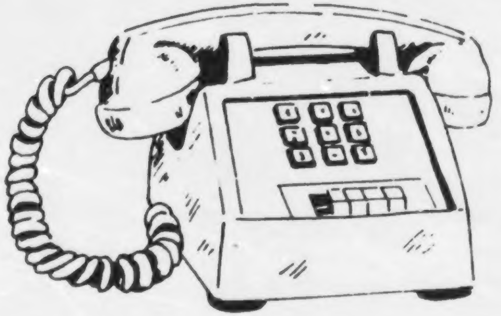
TM 3

DA - 23-H

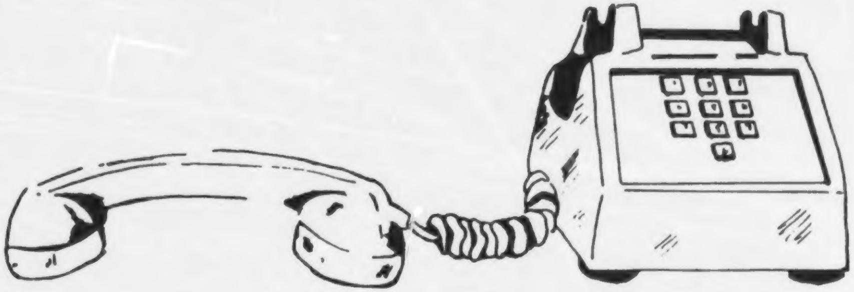
Leaving Telephone Unattended



Lay Receiver Against Side Of Wall



Telephone Press Hold Button

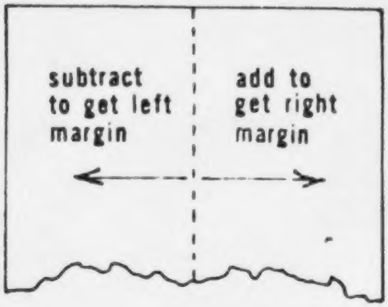


Lay Receiver Flat

Indexing Personal Names

Personal Name	Unit 1	Unit 2	Unit 3
Jessica Abner	Abner	Jessica	
William Allway	Allway	William	
Wendy Atwood	Atwood	Wendy	
Maria Dela Rosa	Dela Rosa	Maria	
Kirk McCluskey	McCluskey	Kirk	
Daniel Murphy	Murphy	Daniel	
Pamela Ann Osgood	Osgood	Pamela	Ann
L. M. Steward	Steward	L.	M.
Lawrence M. Steward	Steward	Lawrence	M.
Cheryl Webb	Webb	Cheryl	
Robin Wells	Wells	Robin	
Sarah Hatfield-Zabrinski	Zabrinski	Hatfield	Sarah

Margins - Elite And Pica



For an elite machine with 50 as center

50 space line 50 divided by 2 = 25		60 space line 60 divided by 2 = 30		70 space line 70 divided by 2 = 35	
50	50	50	50	50	50
-25	+ 25	- 30	+ 30	- 35	+ 35
25	+ 5 bell	20 L	+ 5	15 L	+ 5
Left Margin	80 Right Margin		85 R		90 R

4 inch line = 4 × 12 = 48 = 50 space line

5 inch line = 5 × 12 = 60 space line

6 inch line = 6 × 12 = 72 = 70 space line

For a pica machine with 42 as center:

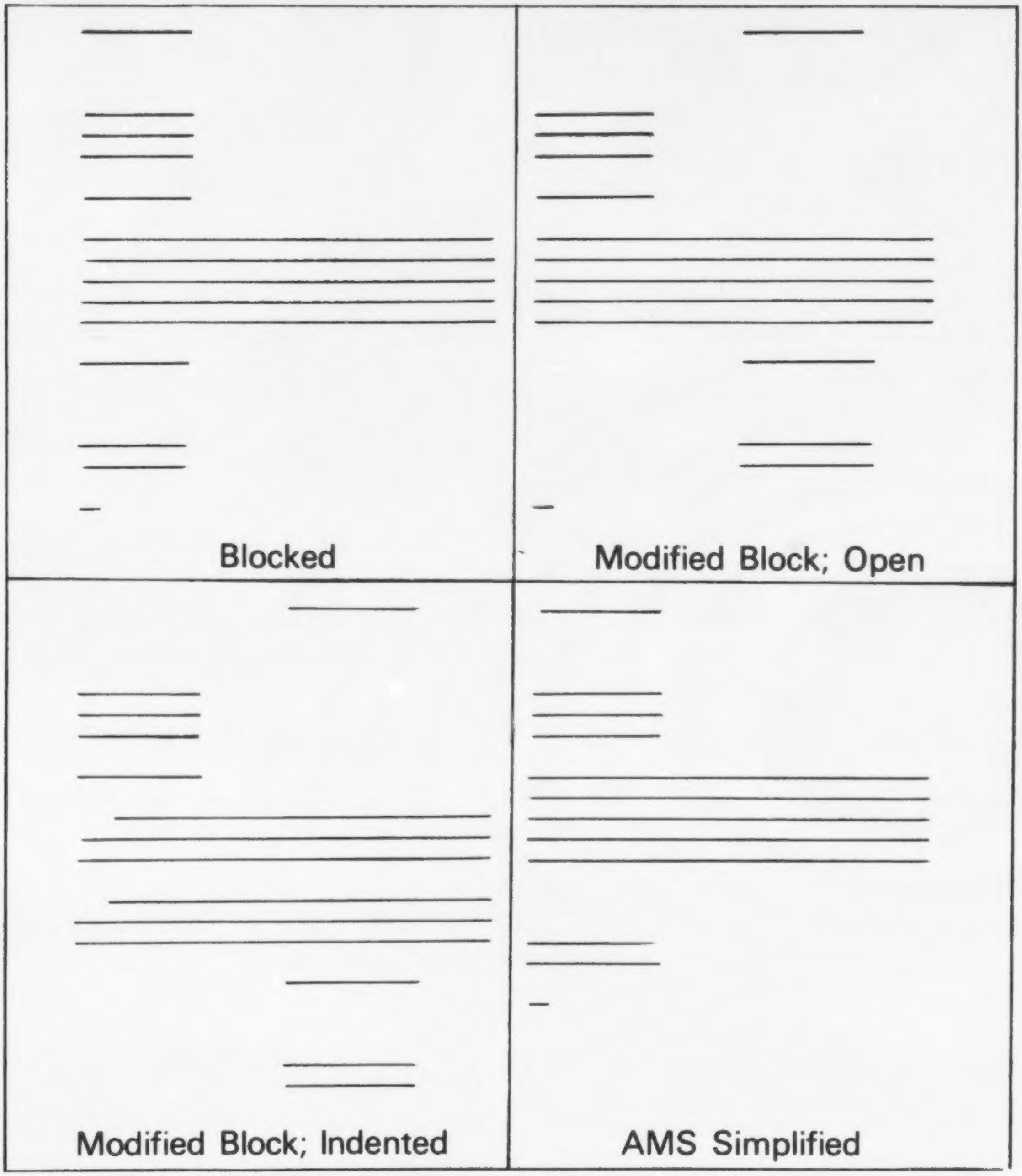
50 space line 50 divided by 2 = 25		60 space line 60 divided by 2 = 30		70 space line 70 divided by 2 = 35	
42	42	42	42	42	42
- 25	+ 25	- 30	+ 30	- 35	+ 35
17 L	+ 5 bell	12 L	+ 5	7 L	+ 5
	72 R		77 R		82 R

4 inch line = 4 × 10 = 40 space line

5 inch line = 5 × 10 = 50 space line

6 inch line = 6 × 10 = 60 space line

Letter Styles



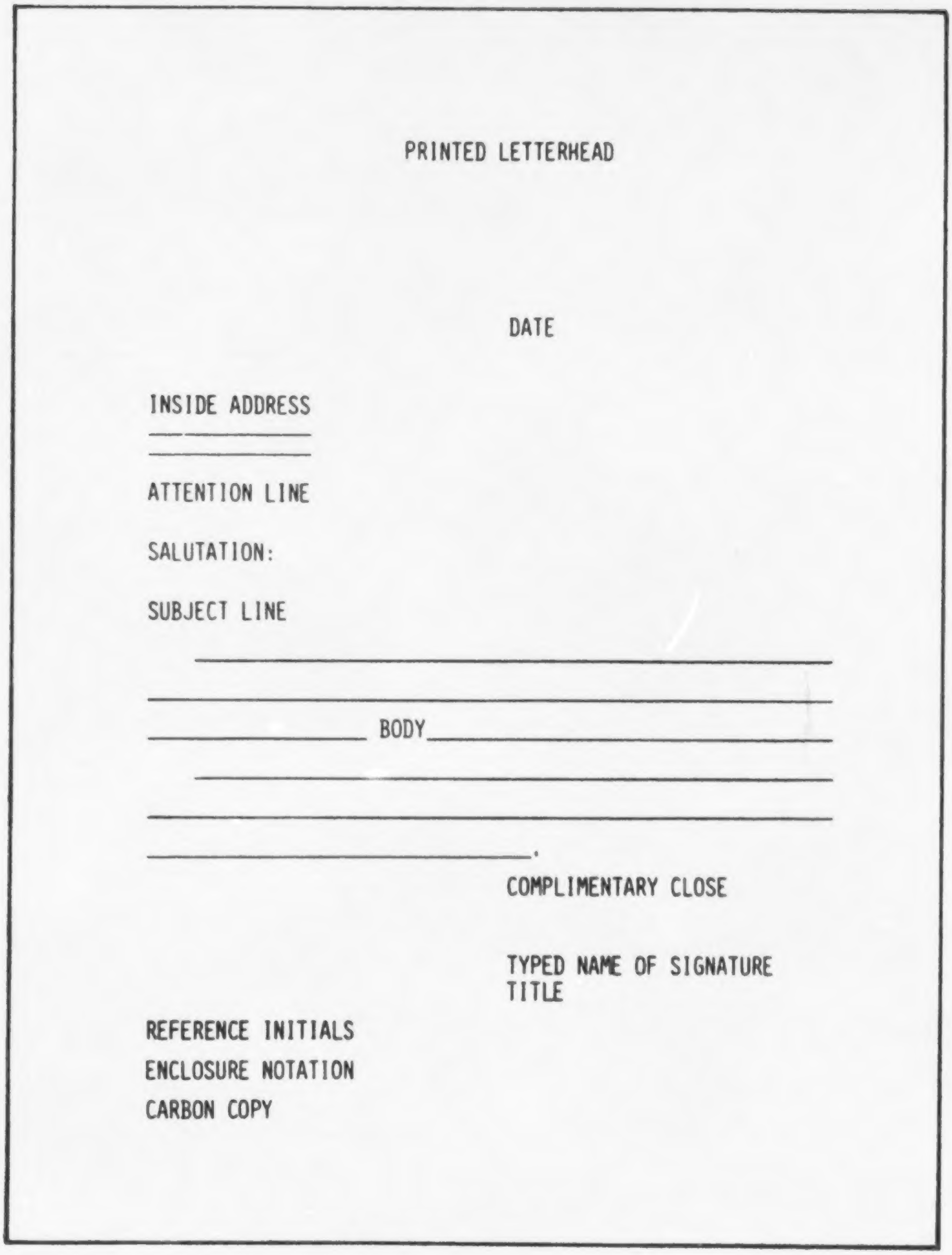
Blocked

Modified Block; Open

Modified Block; Indented

AMS Simplified

Parts of a Letter



PRINTED LETTERHEAD

DATE

INSIDE ADDRESS

ATTENTION LINE

SALUTATION:

SUBJECT LINE

BODY

COMPLIMENTARY CLOSE

TYPED NAME OF SIGNATURE
TITLE

REFERENCE INITIALS
ENCLOSURE NOTATION
CARBON COPY

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #1--PRACTICE CORRECT WORD USAGE

NAME ______________________________ SCORE ____________

Words are like shoes; they are used to propel you to a certain destination. However, the way you choose to travel is up to you. It may be quicker and easier to walk in sneakers, but silver slippers boost your pride and change your image of yourself. You will notice the response of those around you changing also.

Words are exactly the same way with dental assistants, and they are well worth studying. You will be amazed how fast gates will open for you that might otherwise be impassable if you use correct language.

Study the following list of statements and be prepared to respond with the correct usage.

ON THE TELEPHONE:

"Thank you for calling."	"Thank you for calling, Mrs. Jones."
"The doctor's tied up right now."	"The doctor's with a patient, but may I help you?"
"May I ask who's calling, please?"	"May I tell the doctor who's calling, please?"
"You're overdue for your physical."	"Your last physical examination was May 10th, which is over ten months ago."
"We'll send it to the lab."	"The doctor's laboratory technician will adjust it."
"It sounds like a dry socket."	"I really couldn't tell you, Mrs. Smith. Even the doctor would have to examine you first to determine what it is."
"The doctor's not here. I don't know where she went."	"The doctor is down at the lab, but I expect her back shortly."
"The doctor will call you back in while."	"The doctor will call you back as soon as possible."
"Don't worry about it. It's just phase patients go through."	"Please hold the line, Mr. Blank, and I'll ask the doctor."
"I'm sorry, we never quote fees on the telephone."	"Even the doctor couldn't tell you without an examination. I'll be glad to schedule a time for you to see the doctor....."
"What's your name?"	"Would you spell your first and last name for me, please?"

ASSIGNMENT SHEET #1

(RE: overdue account) "When Mrs. Jones comes home, will you have her call Dr. Deith's office?"	"When Gladys comes home, will you have her call Juli at 123-4566, please?"
"Huh?"	"I'm sorry, I didn't hear you."
"The doctor can't come to the phone, but I can take the message."	"The doctor is with a patient just now. May I give him the message, or can he call you back?"

MAKING APPOINTMENTS:

"I can't take you without an appointment."	"The doctor's schedule is filled, Mrs. Green, but I'll find the quickest appointment possible that he can see you."
"The doctor's running behind schedule."	"The doctor had to re-schedule because of an emergency."
"I can give you Tuesday at 10."	"The doctor can see you Tuesday at 10."
"There's no time to squeeze Mary into your appointment, Mrs. Jones."	"The doctor needs a full appointment to properly examine Mary, Mrs. Jones."
"You're wrong, Mr. Kent. Your appointment is at 2."	"I probably didn't make the time clear to you, so I'll schedule another time for you to see the doctor."

TALKING WITH PATIENTS:

"Don't worry, Mrs. Cole, there's nothing to it."	"Don't worry, Mrs. Cole, it isn't a complicated procedure."
"Your sister-in-law's doing fine after her extractions."	"Your sister-in-law was fine the last time I saw her."
"I'm sorry you feel so terrible."	"I'm sorry you're so uncomfortable."
"My doctor probably has the biggest practice in town."	"My doctor is a prince to work for."
"What's the trouble?"	"What seems to be bothering you, Mr. Jones?"
"Would you like to come in, please?"	"The doctor is ready to see you, Mr. Jones."
"I don't know."	"Just a moment, and I'll check that out for you."
"No kidding."	"Really?"
"Bye-bye" or, "bye now."	"Goodbye, Mrs. Clark. We'll see you next week."

ASSIGNMENT SHEET #1

"The doctor's out to coffee. You could call back in about ten minutes."	"The doctor is out of the office just now. If you'll give me your number, he will call you as soon as possible." (CAUTION: Never give out information that your doctor is out of town.)

Respond with the correct answer in the space provided below the statement.

"Thank you for calling."

"May I ask who's calling, please?"

"It sounds like a dry socket."

"What's your name?"

"The doctor can't come to the phone, but I can take the message."

"I can't take you without an appointment."

"I can give you Tuesday at 10."

"You're wrong, Mrs. Kent. Your appointment is at 2."

"Don't worry Mr. Cole, there's nothing to it."

"What's the trouble?"

ASSIGNMENT SHEET #1

"I don't know." ____

____

"The doctor's out to coffee. You could call back in about ten minutes." ______________

____

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #2--FILL IN APPOINTMENT CARDS

NAME ____ SCORE ____________

It is very important that you give each of your patients an appointment card. Write the patient's name, time of appointment, and date in the appointment book, then write the time and date on the appointment card. If more than one appointment is given, try to give the patient the same time of day for each appointment. This makes it much easier for patients to remember. Ask patients to bring their appointment card with them, as this will verify any misunderstanding if the patient should arrive on the wrong day.

Examples of appointment cards:

Mary Ann Smith, D.D.S
1515 W. 6th, Smalltown, OK 70124

The time noted on this card
is reserved for you.

Monday ____________ AT ____________
Tuesday ____________ AT ____________
Wednesday ____________ AT ____________
Thursday ____________ AT ____________
Friday ____________ AT ____________
Saturday ____________ AT ____________

If appointment cannot be kept, please give 24 hr. notice.
Office Phone: 477-2000

Reservation ________________________

Day	Date	Time
________	________	________
________	________	________
________	________	________
________	________	________

This time is reserved especially for you. If you are unable to keep an appointment, please call a day ahead so that another patient can use this time.

Appoint the patients on the next pages by filling in the cards provided.

ASSIGNMENT SHEET #2

Debbie Griffith would like an appointment for July 30, at 1:00 p.m.

Tara Stone D.D.S. INC.
Leonard Leskin D.D.S. INC.
Doctors of Dental Surgery
823 South Pine Street
Stillwater, OK 74074
Phone: 372-1155

Reservation____________________

Day	Date	Time

This time is reserved especially for you. If you are unable to keep an appointment, please call a day ahead so that another patient can use this time.

(BACK OF CARD)

TO SERVE YOU BETTER

FEES--A written itemized estimate will accompany the explanation of care needed. Questions are appreciated.

PAYMENT--Complete payment is expected at the time of care. Any other arrangement must be agreed on in advance. Federal legislation limits our role with credit. (Federal Truth-In-Lending Act effective July 1, 1969).

EMERGENCIES--Call our office immediately. Time has been set aside every day for those in pain. After office hours call Dr. Stone or Dr. Leskin at home.

BROKEN APPOINTMENTS--We are unable to serve those who repeatedly misuse time that others need.

PREVENTIVE CARE--Is a service provided to detect disease early, prevent pain and avoid loss of teeth.

COMPLETE DENTAL EXAMINATION--Includes a history of past treatment, a thorough gentle visual examination and necessary X-rays.

Lynne Murnane would like an appointment for June 20, at 10:30 a.m.

BOB G. FLETCHER D.D.S.
622 Valley St. Blue Skies, USA

The time noted on this card is reserved for you.

Monday________________AT________
Tuesday________________AT________
Wednesday______________AT________
Thursday_______________AT________
Friday_________________AT________
Saturday_______________AT________

If appointment cannot be kept, please give 24 hr. notice.
Office Phone: 477-2000

ASSIGNMENT SHEET #2

Jamee Sloan would like an appointment for Tuesday, June 10, at 2:30 p.m.

Jane G. Mussett D.D.S.
1515 Surrey Street, Happydale, USA

The time noted on this card is
reserved for you.

Monday ______________ AT ____________
Tuesday ______________ AT ____________
Wednesday ______________ AT ____________
Thursday ______________ AT ____________
Friday ______________ AT ____________
Saturday ______________ AT ____________

If appointment cannot be kept, please give
24 hr. notice.
Office Phone: 477-2000

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #3--TYPE CORRECT WORDS FOR YOUR LETTER

NAME ______________________________ SCORE ____________

When a reader reads your letter, the use of negative words gives him or her a negative attitude. Positive words are like a winning smile, enthusiasm and laughter. They put the reader in a positive frame of mind.

Practice typing the words listed below, and think as you type how the words can be used in your letter.

- ability
- achieve
- advantage
- agree
- beauty
- benefit
- character
- charming
- comprehensive
- determined
- economy
- fun
- good
- guarantee
- health
- helpful
- holiday
- ideal
- industrious
- joy
- judgment
- kind
- knack
- lasting
- lovely
- maximum
- music
- news
- opportunity
- pleasant
- productive
- profit
- pure
- reasonable
- rejoice
- reliable
- satisfy
- save
- service
- smile
- success
- think
- thrive
- truth
- understand
- unity
- useful
- valuable
- victory
- vigorous
- warm
- wholesome
- winning
- wonderful
- you
- youthful

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #4--TYPE PREFIXES, ROOT WORDS AND SUFFIXES

NAME ____ SCORE ____________

The English language is composed of many words, some of them similar to each other because they belong to the same family. When words belong to the same family, they usually come from the same "root" or "stem" word. The root, stem, or basic part of the word expresses its primary or essential meaning. Prefixes and suffixes may be added.

Prefixes are letters or syllables placed before the word. A prefix modifies or qualifies the meaning of the root word.

Suffixes are syllables or letters placed at the end of the word. A suffix also modifies or qualifies the meaning of the word.

Affixes are both prefixes and suffixes. For example, the root word *part* comes from the Latin word *pars* or *partis*. It means "something less than the whole." Add a prefix, *de*, to make the word depart, which means to "go away." Add a suffix, *ment*, and we have department, meaning a separate division. Or if you wish to add just a suffix and drop the prefix, *de*, you may use parting which means "taking leave."

Words in dental terminology can also be classified as root words, root words with prefixes, root words with suffixes, and root words with affixes. If you will learn the meaning of certain dental prefixes, stem words, and suffixes, your understanding of a dental vocabulary will be acquired much sooner than if you tried to memorize each individual word.

In order to assist you with dental terminology (oral and written) so necessary for your success as a dental assistant, practice typing the following prefixes, root words, and suffixes.

(NOTE: As you are typing you are learning.)

COMMON PREFIXES

ante--before, preceding, in front of

anti-, ant--against, in return, opposed to, instead, counter

bi--two

bio- (or bi)--relation to life or living organisms

centi--(1/100)

chemo--relating to chemistry

di-, dia--through, between, apart, across

denti-, dento--both refer to tooth or dental

ASSIGNMENT SHEET #4

e--without, as dentulous means with teeth, endentulous means without teeth

endo-, end--within

ex--beyond, out of, without, from, off

hydro (hydr)--water or defining a relation to water, as a disease which indicates an accumulation of water or other fluids in some part of the body. In chemistry the meaning refers to hydrogen

hyper--excessive

hypo--insufficient or defective

inter--between

intra--within

kilo--thousand

mal--ill or bad

micro--small

mille--(1/1000)

osis--degeneration or loss of

osteo--bone

odont--tooth

para--beside, beyond, near

per--throughout

peri--about, enclosing, around

pedo--child

poly--many

post--behind or after

pre--before

pro--in front of

pros--toward

pyo (or py)--pus formation

ASSIGNMENT SHEET #4

radio--radium referral

re--again

septo (septicemia)--disease caused by microorganisms and their poisonous products in the bloodstream

sub--under, below, deficient

super--above

syn--with, together

therm--heat

trans--through or across

COMMON STEM WORDS

odont--refers to tooth

derma--skin

liter--1.0567 liquid quarts

meter--a measuring unit

COMMON SUFFIXES

-er--means one who belongs to or is connected with, such as a lawyer, bookkeeper

-al--of, like, pertaining to

Example: palatal: pertaining to the palate

-ics-(1) study of, practice, skill: pedodontics
-(2) characteristic actions: acrobatics
-(3) characteristic qualities: numeric (file)

-itis--forms the names of inflammatory diseases: means inflammation of

Example: Tonsilitis: Inflammation of the tonsils

-logy--means study of

Examples: Zoology, pharmacology, psychology, pathology

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #5--INDEX AND TYPE NAMES

NAME____ SCORE_____________

To keep a dental office running smoothly, it is necessary that all records be kept in their proper place. To do this you must know how to alphabetize and index names quickly and correctly.

PART I--INDEX NAMES

Index each name below on a 3 x 5 card or paper cut to that size. Start each name 1/2 inch from the top and 1/2 inch in from the left margin. Number each card in the top right-hand corner. Arrange the cards in alphabetical order after you finish indexing.

1. Charles N. Bledsoe
2. Oliver Alldridge
3. Lucille Cain
4. James V. Adams
5. Neal S. Baker
6. Nowlin Caine
7. Marie Ainsworth
8. Clinton Basham
9. Hoyt Carney
10. Kimberly Baird
11. Fred Adams
12. Billy Bryant
13. James L. Adams
14. Raymond M. Banks
15. A. M. Aimsworth
16. Leland K. Barrow
17. Lorene Boggs
18. Olivia Alldredge
19. C.B. Bryant
20. Thos. L. Bailey

PART II--TYPE NAMES

1. Type each of the following names in correct indexing order on a 3 x 5 card.
   a. Set left margin six spaces from edge of card
   b. Type name on third line from top
   c. Type street address on fifth line
   d. Type city, state, and zip code on sixth line

ASSIGNMENT SHEET #5

Betsy Book, 6713 Kenwick, Stillwater, Oklahoma 74074

Ralph Brown, 1313 Ruby St., Perry, Oklahoma 74073

Carl Baker, 1212 Finwich, Tulsa, Oklahoma 72115

Marie Maddox, 713 Alta Vista, Tulsa, Oklahoma 72120

Susan Tompson, 616 Ridgeway, Pryor, Oklahoma 76194

Sue B. Thompson, 603 Ridgeway, Cushing, Oklahoma 74098

R.J. Brown, 4789 Wren, Oklahoma City, Oklahoma 71060

Betsy Book, 1121 Kendel, Norman, Oklahoma 71964

Henry O'Riley, 226 Rodeo, Oklahoma City, Oklahoma 70051

Sue Ann Nevins, 111 Freeway Dr., Guthrie, Oklahoma 70107

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #6--COMPOSE A BUSINESS LETTER

NAME_______________________________________ SCORE_____________

Outgoing letters prepared by the dental assistant represent your doctor(s)! Because letters are written to handle "routine" matters, sometimes their importance is overlooked or underestimated. The procedures that you use for letter writing are just as exacting as the procedures used by your doctor(s) in preparing for a restoration.

Use the guidelines below to prepare a business letter:

A. DATELINE

1. Position date line two to four spaces below the letterhead

   (NOTE: The position of the date line on the page depends to some extent on the style of the letter used and the length of the letter. It should be flush with either the right or left hand margin, depending on the style of the letter.)

2. Date the letter the day it is dictated, not the day it is typed
3. Do not use "d," "nd," "rd," "st," or "th" following the day of the month
4. Do not abbreviate or use figures for the month
5. Do not spell out the day of the month or the year, except in very formal letters

B. INSIDE ADDRESS

(NOTE: The inside address contains the name of the addressee and the address, including the zip code. When addressing an individual in a company, the inside address contains both the individual's name and that of the company. It may also contain the individual's business title.)

1. Begin the inside address at the left-hand margin of the letter, not less than two spaces, nor more than 12, below the date line

   (NOTE: The exact position of the first line of the address depends on the length of the letter.)

2. Avoid extending the inside address beyond the middle of the page
3. Single space the address even if the body of the letter is double spaced
4. Use the official name of the company addressed

   (NOTE: If "Company," "Co.," "The," "Inc.," or & is part of the company's official name, use the form shown by the company title.)

ASSIGNMENT SHEET #6

5. Do not precede the street number with a word or a sign or with a room number

6. Use post office box number in preference to street address, if you know it

7. Spell out the numerical names of streets and avenues if they are numbers of 12 or under

   (NOTE: When figures are used, do not follow with "d," "st," or "th.")

8. Use figures for all house numbers except "one."

9. Separate the house number from the numerical name of a thoroughfare with a space, a hyphen, and a space

10. Avoid abbreviating the names of cities, unless the abbreviation is standard

    Examples: St. Louis, St. Paul

11. Do abbreviate the names of states, territories, and United States Possessions

12. Write the zip code number after the state; do not separate zip code from state with a comma or put a comma in zip code

    (NOTE: Not less than two spaces nor more than six spaces should be left between the last letter of a state and the first digit of the zip code.)

13. Put city, state, and zip code on the same line

14. Do not abbreviate business titles or positions such as president, secretary, and sales manager; place person's business title on the first line if title is short and on the second line if the title is long

    (NOTE: The modern trend is to omit the business title, particularly if it makes the address run over four lines.)

15. Place the individual's name on the first line and company's name on the second line when addressing an individual in a firm, corporation, or group

16. Do not hyphenate a title unless it represents a combination of two offices

C. SALUTATION

1. Type the salutation two spaces below the inside address, flush with the left-hand margin

   (NOTE: If an "attention" line is used, type the salutation two spaces below the attention line.)

2. Capitalize the first word, the title, and the name; follow a title with a surname

ASSIGNMENT SHEET #6

3. Use a colon following the salutation

   (NOTE: A comma is used only in social letters, particularly those written in longhand.)

4. Never use a business title or designation of position in a salutation

5. Use "To Whom It May Concern" as salutation in letters not addressed to any particular person or firm: capitalize each word

   Example: A general letter of recommendation

D. BODY OF LETTER

1. Single space lines of message

   (NOTE: The body may be double spaced if message is very short.)

2. Leave one blank line between paragraphs

3. You may indent paragraphs five spaces

   (NOTE: This indention is required if the message is double spaced.)

4. Keep message brief

5. Include all information that the receiver needs

6. Say what is meant simply and directly

7. Present your information correctly and in proper form

   (NOTE: Make sure all facts, figures, spelling, punctuation, grammar, and style details are correct.)

8. Be courteous to your reader

9. Be concise without being curt

   (NOTE: This tone is usually set by the first sentence of the letter.)

10. Create a favorable impression

E. COMPLIMENTARY CLOSE

1. Should be typed or written with one blank line between the last line of the body and the closing

2. Should have only the first word capitalized

3. Should correspond to the formality or informality of the salutation

ASSIGNMENT SHEET #6

F. REFERENCE NOTATION

(NOTE: This is used only when the person does not type his or her own letter.)

1. Is blocked at the left margin
2. Is typed one blank line below the signer's identification line
3. It is not necessary to repeat signer's initials in the reference line if his or her name is typed in the identification line

Examples:	ABS:AK	abs/k	amk
	ABS:K	A.B.Smith/ak	ABS/ak

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #7--CARE FOR INCOMING MAIL

NAME ______________________________ SCORE __________

One of the very important duties of the dental assistant is to handle the daily mail. It is not unusual for a doctor to receive more mail than any other type of professional person. It is important that you learn to sort and care for it properly.

Included in each day's mail may be checks, statements, personal letters, magazines, samples and packages.

Always open mail neatly, using a letter opener.

NEVER open mail marked "personal."

Put the following mail on doctor's desk:

Announcements of dental meetings
Advertisements of interest to doctor
Letters from professional people
Letters soliciting contributions
Professional journals
Letters from patients

Mail handled by the dental assistant:

Invoices and back orders for supplies
Payment of accounts
Statements for office supplies
Magazines and newspapers
Packages and samples

(NOTE: Keep envelopes to check the current addresses; also check to see if there is anything else in the envelope.)

PART I

Distinguish between the mail put on the doctor's desk and the mail the assistant will take care of by placing a "D" for doctor and "A" for assistant in the chart on the next page.

ASSIGNMENT SHEET #7

INCOMING MAIL	DOCTOR	ASSISTANT
Invoices and back orders for supplies		
Letters from patients		
Packages and samples		
Magazines and newspapers		
Professional journals		
Letters soliciting contributions		
Letters from professional people		
Payments of accounts		
Statements of office supplies		
Advertisements of interest to doctor		
Announcements of dental meetings		

ASSIGNMENT SHEET #7

PART II

Check off the following duties as you perform them, or discuss them in class. If you are in doubt, use your textbook for review.

	YES	NO
1. Did you check money orders and checks for mistakes?		
2. Did you put them in a safe place until you can post them?		
3. Did you check invoices for errors and file them under unpaid bills?		
4. Did you open sample packages and put them into the cabinet?		
5. Did you open packages and place laboratory cases for doctor to see?		
6. Did you open packages and place supplies in supply cabinet?		
7. Did you check supplies against the invoices?		
8. Did you place magazines in the waiting room?		
9. Did you discard junk mail?		

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #8--MAINTAIN A WANT LIST

NAME____ SCORE______________

The assistant should use a "want list" for items that are needed in the dental office. Some supply houses provide a list of items used in a dental office as a reminder of things to be ordered. Check items on want list as supplies get low. When items are received, they are removed from the list.

Use the list on the next page to check supplies in your classroom.

ASSIGNMENT SHEET #8

ORDER FORM

_____ ABSORBENTS
_____ ACRYLICS
_____ AIROTOR CHUCKS
_____ AIROTOR TURBINE
_____ ALGINATES
_____ ALLOY
_____ AMALGAMATOR
_____ ANESTHETICS
_____ ANTIBIOTICS
_____ APPLICATORS
_____ APPT. BOOK
_____ ARTICULATORS
_____ ARTIC. PAPER
_____ AUTOCURE
_____ BACKINGS
_____ BANDS
_____ BASE PLATES
_____ BELTS
_____ BIOTONE
_____ BONFIL
_____ BOOKKEEPING
_____ BOWLS
_____ BROACHES
_____ BRUSHES
_____ BUFFS
_____ BULBS
_____ BURS, CARBIDE
_____ BURS, R&R
_____ BURS, STEEL
_____ CARDS
_____ CARRIER, AMAL.
_____ CARTONS-WASTE
_____ CASTING EQUIP.
_____ CASTONE
_____ CAVITY LINING
_____ CAVITY PRIMER
_____ CEMENTS
_____ CLAMPS
_____ CLEANSERS
_____ COMPOUNDS
_____ CONES
_____ CONTAK RELINER
_____ CONTRA ANGLE
_____ COTTON ROLLS
_____ COVERS, H.R.
_____ COVERS, TABLE
_____ CROWN FORMS
_____ CUPS, PAPER
_____ CUPS, RUBBER
_____ DAM-RUBBER
_____ DENTOCOLL
_____ DENTURE MAT.
_____ DENTURE RELINE
_____ DEVELOPER & FIX.
_____ DIAMOND INSTS.
_____ DISKS
_____ DORCATE
_____ DRILLS
_____ DUROC
_____ DYCAL
_____ EJECTORS
_____ ELEVATORS
_____ EQUIPMENT
_____ EQUIP. SERVICE
_____

_____ EXPLORERS
_____ FACINGS
_____ FASKUT PTS. & WH.
_____ FILES
_____ FILLING MAT.
_____ FILM MOUNTS
_____ FILMS
_____ FIXER
_____ FLASKS
_____ FLOSS NYLON
_____ FOIL
_____ FORCEPS
_____ GLASS SLABS
_____ GOLD
_____ GOLD SCRAP
_____ GRAY INVESTMENT
_____ GUTTA PERCHA PTS.
_____ GYPSUM PRODUCTS
_____ HANDLES
_____ HANDPIECE
_____ HUE-LON
_____ HYDROCOLLOID
_____ IMPRESSION MATS.
_____ IMPRESSION PASTE
_____ INLAY WAX
_____ INSTRUMENTS
_____ INVESTMENTS
_____ JELCONE
_____ JELTRATE
_____ KADON
_____ KLEENEX
_____ KNIVES
_____ LAB. SUPPLIES
_____ LANCETS
_____ LIGATURE
_____ LIGHTS
_____ LINGUAL BARS
_____ LININGS-CAVITY
_____ LUBRICANTS
_____ LUCENT
_____ LUCITONE
_____ LUCITONE, CH.
_____ MANDRELS
_____ MATRICES
_____ MEDICINES
_____ MERCURY
_____ MERCURY DISP.
_____ MIRRORS
_____ MIXCUPS
_____ MIXING PADS
_____ MODELING COMP.
_____ MODERN TENACIN
_____ MORSE SCALERS
_____ MORTARS
_____ MOUTH WASH
_____ NAPKINS
_____ NAPKIN HOLDERS
_____ NEEDLES
_____ OIL
_____ OPAQUER
_____ ORDER CARDS
_____ ORTHODONTIA MAT.
_____ ORTHODONTIC RESIN
_____ OXYGEN
_____ PAPER, ARTC.

_____ PELLETS
_____ PESTLES
_____ PLASTER
_____ PLIERS
_____ PLUGGERS
_____ POINTS
_____ POLISH
_____ PORCELAIN
_____ PROPHY SUPPLIES
_____ PROPS
_____ PUMICE
_____ REAMERS
_____ RELINERS
_____ REPAIR MAT.
_____ RESIN FILL. MAT.
_____ RESINSLAB
_____ RE-STOR
_____ RETAINERS
_____ ROOT CANAL
_____ RUBBER GOODS
_____ RUBBERJEL
_____ SCALERS
_____ SCISSORS
_____ SCRAPERS
_____ SEDATIVES
_____ SEPARATING DISCS
_____ SEPARATORS
_____ SILICATES
_____ SLABS
_____ SOAP
_____ SOLUTIONS
_____ SPATULAS
_____ SPONGES, EXOD.
_____ SPOTTING PASTE
_____ SQUEEZE CLOTHS
_____ STERILIZERS
_____ STONES
_____ STOPPING
_____ STRIPS
_____ SURGICAL INSTS.
_____ SUTURES
_____ SYNTREX
_____ SYRINGES
_____ TEETH
_____ TEMP. BRIDGE RESIN
_____ TEMP. STOP.
_____ TOWELS
_____ TRAYRESIN
_____ TRAYS
_____ TUBING
_____ TWEEZERS
_____ UNI-STRIPS
_____ VARNISH
_____ VIBRATORS
_____ WASTE REC'S
_____ WAXCOTE
_____ WAXES
_____ WHEELS
_____ WIRE
_____ X-RAY SUP.
_____ NEW SUPPLY OF THESE PADS

SECRETARIAL PROCEDURES
UNIT I

ASSIGNMENT SHEET #9--ORDER SUPPLIES

NAME ______________________________ SCORE __________

There are several ways to order dental supplies: by telephone, "rush order" cards, order blanks, or from regular calls made to your office by dental supply representatives. Most offices will order from the representative. Be courteous to your representative as he or she can be of assistance in many ways. Sometimes you will need to use a "rush order" card for additional supplies.

Use the "rush order" card below to order the following supplies:

2 bottles - Z. O. E.
1 box - Periapical X-rays
1 box - Squeeze cloths
1 jar - Pumice

(NOTE: Be sure to put date, doctor's name, and address.)

HENDERSON DENTAL SUPPLY
1515 W. 6th
Pleasantville, OK 74000

Date ____________________ 19____

Please ship the following:--

RUSH ORDER

QUANTITY	ARTICLE

Sign Name and Address Plainly Here

NAME ______________________________

ADDRESS ____________________ CITY ______________

SECRETARIAL PROCEDURES
UNIT I

JOB SHEET #1--OPERATE A TRANSCRIBER

(NOTE: There are various types and brand of transcribers available. Become familiar with the equipment used in your office.)

I. Materials

   A. Transcriber with foot control

   B. Cassette

II. Procedure

   A. Plug into AC outlet

   B. Connect foot control and headrest (earpiece)

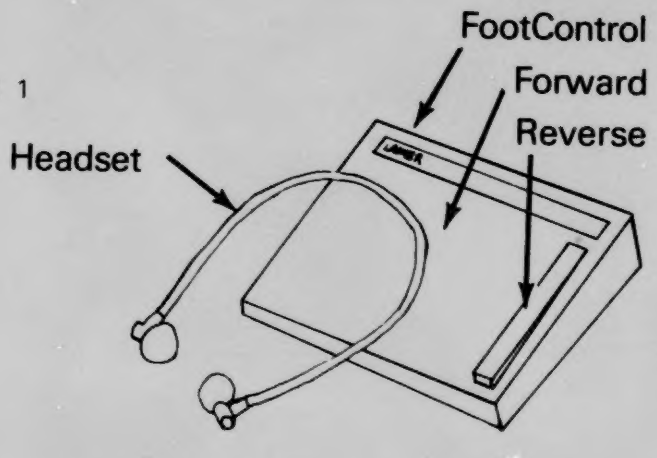
   C. Put on headrest (earpiece)

   D. Load by pressing compartment release button and snap in cassette with side to be transcribed facing up

   (NOTE: The on/off control must be in the off position to load and unload.)

   E. Press center of foot control to listen; press edge of foot control to reverse tape control for listening (Figure 1)

FIGURE 1



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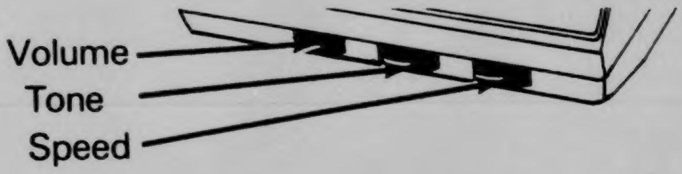
JOB SHEET #1

F. Adjust volume, tone and speed (Figure 2)

FIGURE 2



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G. When transcription is complete, press rewind button to move tape back to beginning

H. Turn transcriber off

I. Press cassette compartment release button

J. Remove cassette

SECRETARIAL PROCEDURES
UNIT I

TEST

NAME ______________________________ SCORE ____________

1. Match terms associated with secretarial procedures to their definitions. Write the correct numbers in the blanks provided. Terms continue on the next page.

_____a. Balance in a person's favor on an account

_____b. First name or initial of a person and a middle name or an initial

_____c. Systematic, orderly arrangement and storage of letters, invoices, statements, catalogs, etc.

_____d. Process of dividing names into units for the purpose of selecting the caption under which a record is to be filed

_____e. Accurate list of supplies needed

_____f. Legal name of a person, whether it is usually used as an individual name or as a part of a business name

_____g. Arrangement of single letters or words according to the alphabet

_____h. Part of a name that is used in arranging alphabetically

_____i. Notation in the index showing that the record is filed somewhere else

_____j. Person's last name

_____k. Surname and at least one given name or initial of a person

_____l. Order in which the units of a name are arranged for filing

_____m. Order in which a full name normally appears

1. Personal name
2. Surname
3. Given name
4. Full name
5. Natural order
6. Indexing
7. Indexing arrangement
8. Indexing unit
9. Coding
10. Alphabetizing
11. Filing
12. Numerical filing
13. Credit slip
14. Running inventory
15. Salutation
16. Cross-reference

_____n. Process of marking the indexing units in a name to indicate the order in which the units will be filed

_____o. Assigning consecutive numbers to each correspondent or name that warrants an individual folder

_____p. An expression of greeting

2. Select from the list below duties of the business office assistant. Mark each correct answer with an "X."

_____a. Files records, orders supplies

_____b. Types letters

_____c. Makes appointments

_____d. Helps edit articles for medical journals

_____e. Transcribes letters and dental health reports

_____f. Renews narcotic prescriptions

_____g. Helps other employees with their taxes

_____h. Greets patients

_____i. Confirms patients' appointments

_____j. Uses telephone efficiently

_____k. Reads doctor's private mail

_____l. Opens, reads, and sorts incoming mail

_____m. Makes arrangements for doctor's social engagements

3. Select from the list below qualities of a good telephone manner. Mark each correct answer with an "X."

_____a. Showing interest in caller

_____b. Helpfulness

_____c. Using patient's first name

_____d. Pleasantness

_____e. Promptness

_____f. Politeness

_____g. Soft voice

4. Describe factors that contribute to the success of a professional call.

   a. Choice of words--____________________________

   b. Tone of voice--____________________________

   c. Closure of conversation--____________________________

5. Describe procedures for different types of appointments in the spaces below.

   a. New patient--____________________________

   b. Recall appointment--____________________________

   c. Emergency patient--____________________________

   d. Courtesy service--____________________________

   e. Sales representative--____________________________

   f. School children--____________________________

6. Select from the list below necessary information for the appointment book. Mark each correct answer with an "X."

______a. Telephone number

______b. Patient's full name

______c. Name of patient's spouse

______d. Patient's insurance company

______e. Patient's employer

______f. Patient's work or office address

______g. Time of appointment

______h. Length or purpose of appointment

______i. Work to be done

______j. When recall appointment should be scheduled

7. List requirements for appointment book entries.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

8. Arrange in order the proper sequence for making appointments. Write a "1" to show the first step, a "2" to show the second step, and a "3" to show the third step.

______a. Write appointment card for patient

______b. Complete entry in pencil in units of time

______c. Double-check appointment card and appointment book

9. Select from the list below purposes of confirming appointments. Mark each correct answer with an "X."

______a. Saves time in writing letters

______b. Catches cancellations in time to reappoint

______c. Confirms that patient's telephone number is correct

______d. Acts as courtesy reminder for patient

______e. Saves loss of chair time for doctor

______f. Allows time for patient to talk to doctor about appointment

10. Match types of files to their systems. Write the correct numbers in the blanks provided.

______a. Filed chronologically by month

______b. Maintained in a subject file

______c. Card file organized alphabetically and color-coded by month

______d. Kept together in a file folder or envelope and filed alphabetically or numerically

______e. Kept alphabetically or in patient's record file

1. Patient's record files
2. Business record file
3. Recall file
4. Radiography file
5. Come-up file

11. Select from the list below types of filing systems used in the dental office. Mark each correct answer with an "X."

______a. Numeric

______b. Subject

______c. Family

______d. Alphabetic

______e. Chronologic

______f. Tapes

12. State rules for filing alphabetically by indexing.

a. ____

____

b. ____

____

c. ____

____

d. ____

____

13. Match parts of a numeric filing system to their descriptions. Write the correct numbers in the blanks provided.

_____ a. Contains names or subjects that are arranged alphabetically

_____ b. Contains individual folders with numeric captions

_____ c. Contains miscellaneous folders with alphabetic captions

1. Main numeric file
2. Miscellaneous alphabetic file
3. Card index

14. Distinguish between types of dental supplies. Write an "E" to show expendable items, an "N" to show nonexpendable items, and a "C" to show capital supplies.

_____ a. Reusable items that are not of major cost

_____ b. Items that are consumed or used in services

_____ c. Costly items that are seldom replaced

15. Describe methods of controlling supplies in the lines below.

____

____

____

16. Arrange in order steps for verifying supplies. Write a "1" to show the first step, a "2" for the second step, and so on.

_____ a. File invoice

_____ b. Check supplies received against invoice

_____ c. File back order slip

_____ d. Open supplies upon arrival

17. Match terms associated with letter writing to their definitions. Write the correct numbers in the blanks provided. Terms and definitions continue on the next page.

_____ a. "Good-bye" of the letter

_____ b. Notation regarding a file reference

_____ c. Month, day of the month, and year

_____ d. Opening greeting of the letter

_____ e. Firm's name, address, telephone number, and/or symbol identifying nature of business; usually appears at top of stationery

1. Letterhead
2. Reference line
3. Complimentary close
4. Salutation
5. Date line

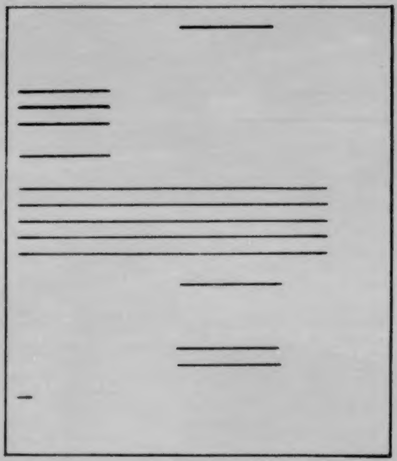
_____f. Name, address, and company of the person to whom the letter is written

_____g. All the material between the salutation and the complimentary close; the message

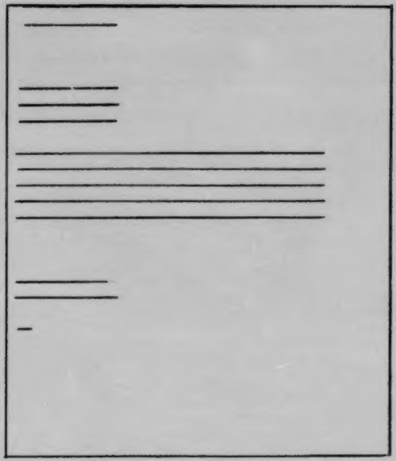
_____h. Typed name and title of the person who signs the letter

6. Signer's identification line
7. Inside address
8. Body

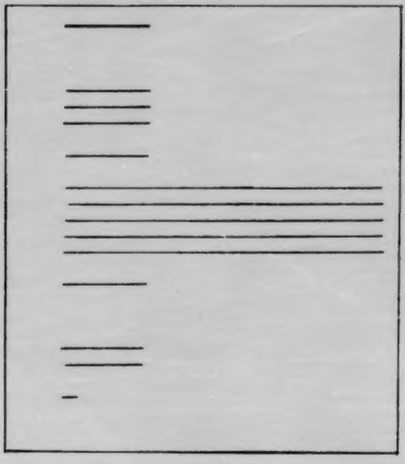
18. Label styles of letters shown in each of the illustrations below. Write the correct names in the blanks provided.



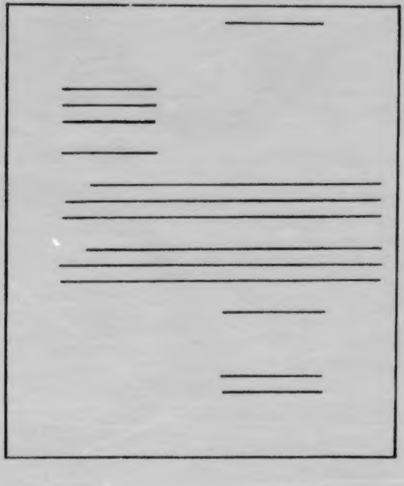
a. ______________________________



b. ______________________________



c. ______________________________



d. ______________________________

19. Match types of complimentary closes to the degree of their formality. Write the correct numbers in the blanks provided.

______a. Sincerely yours
______b. Cordially yours
______c. Yours very truly
______d. Respectfully yours
______e. Yours cordially
______f. Yours sincerely
______g. Very truly yours
______h. Yours respectfully
______i. Yours very sincerely
______j. Yours very cordially
______k. Very respectfully yours
______l. Yours very respectfully
______m. Very sincerely yours
______n. Very cordially yours

1. To show great respect
2. More personal and friendly
3. Somewhat less formal
4. Formal

20. Describe points to remember when transcribing a letter in the lines below.

____

____

____

____

____

____

____

____

____

____

____

21. Practice correct word usage.
22. Fill in appointment cards.
23. Type correct words for your letter.
24. Type prefixes, root words, and suffixes.
25. Index and type names.
26. Compose a business letter.
27. Care for incoming mail.
28. Maintain a want list.
29. Order supplies.
30. Demonstrate the ability to operate a transcriber.

(NOTE: If activities 21-30 have not been finished before the test, ask your instructor when they should be completed.)

SECRETARIAL PROCEDURES
UNIT I

ANSWERS TO TEST

1.

a.	13	i.	16
b.	3	j.	2
c.	11	k.	4
d.	6	l.	7
e.	14	m.	5
f.	1	n.	9
g.	10	o.	12
h.	8	p.	15

2. a, b, c, e, h, i, j, l

3. a, b, d, e, f

4. Description should include the following points:

   a. Choice of words--Give clear explanations; avoid slang expressions; use short, simple, descriptive words; use expressions of courtesy; use person's name often

   b. Tone of voice--Speak directly into mouthpiece; use normal conversational tone; speak clearly and distinctly; say it with a smile

   c. Closure of conversation--Use courtesy; hang up gently

5. Description should include the following points:

   a. New patient--Usually appointed for examination for an hour; indicated in red pencil in appointment book

   b. Recall appointment--Appoints patient for dental examination if bitewing X-rays show problems; if X-rays are normal, calls patient to inform him or her there is no dental work needed, and we will see you in six months

   c. Emergency patient--Appoint patient in emergency time reserved; choose the best time you can from the schedule

   d. Courtesy service--Explain to courtesy patient you work by appointments; give patient appointment as you would an emergency patient

   e. Sales representative--Appoint sales representative as your office advises; use emergency time, and have order ready for review

   f. School children--Appoint after school or on school holidays

6. a, b, g, h
7. a. Accurate
   b. Legible
   c. Complete
   d. In pencil
8. a. 2
   b. 1
   c. 3
9. b, d, e
10. a. 5
    b. 2
    c. 3
    d. 1
    e. 4
11. a, b, d, e
12. a. Individuals' names are indexed with last name (surname) first
    b. Last name is followed by first name (given name)
    c. First name is followed by middle name or initial
    d. "Nothing comes before something"--surnames with initial come before surnames with a first name
13. a. 3
    b. 1
    c. 2
14. a. N
    b. E
    c. C
15. Description should include:
    a. Check supplies off check list as used
    b. Use want list to record supplies needed

16. a. 3
    b. 2
    c. 4
    d. 1

17. a. 3
    b. 2
    c. 5
    d. 4
    e. 1
    f. 7
    g. 8
    h. 6

18. a. Modified block; open
    b. AMS simplified
    c. Blocked
    d. Modified block; indented

19. a. 3
    b. 2
    c. 4
    d. 1
    e. 2
    f. 3
    g. 4
    h. 1
    i. 3
    j. 2
    k. 1
    l. 1
    m. 3
    n. 2

20. Discussion should include at least a portion of the following:

    a. Carefully review all instructions before typing

    b. Type only what you clearly understand. When in doubt, ask. You'll save time and retyping

    c. Return dictation marked "rush" as it is transcribed. Be sure to include attachments, enclosures, and specified number of copies

  d. Use correspondence folders for proper handling of all correspondence materials

  e. Erase cassettes only after typed material has been checked and signed by the originator

  f. Make certain the originator has a sufficient supply of cassettes. Avoid work pile-ups--keep things moving rapidly and efficiently

  g. Type envelope with same address as inside address of letter

  h. Check to make sure enclosures have been included along with letter

21. Evaluated to satisfaction of instructor

22. Evaluated to satisfaction of instructor

23. Evaluated to satisfaction of instructor

24. Evaluated to satisfaction of instructor

25. Evaluated to satisfaction of instructor

26. Evaluated to satisfaction of instructor

27. Evaluated to satisfaction of instructor

28. Evaluated to satisfaction of instructor

29. Evaluated to satisfaction of instructor

30. Performance skills evaluated to satisfaction of instructor

DENTAL ACCOUNTING
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to handle business transactions carried out in the dental office. The student should also be able to use two types of bookkeeping systems and fill out all business forms needed. This knowledge will be evidenced through completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with business procedures to the correct definitions.
2. Describe responsibilities of the bookkeeping assistant.
3. List ways in which patients' accounts are handled.
4. Match types of bookkeeping systems to the correct descriptions.
5. Complete a chart on steps to follow through a collection system.
6. Select from a list items listed on the charge slip and ledger.
7. Arrange in order steps in using the daily log/journal page.
8. Arrange in order steps used to balance daily log/journal page.
9. Identify parts of pegboard system.
10. State two methods of balancing daily log/journal page in the pegboard system.
11. Match special entries in bookkeeping systems to their correct definitions.
12. Describe steps in making a bank deposit.
13. Select from a list items that appear on a monthly expense sheet.
14. Select from a list items found on a record of employees' salaries and tax deductions.
15. Describe the process of depositing withheld income tax and Social Security (FICA) taxes.
16. Identify parts of a check.

17. Select from a list items needed on a check stub.
18. Arrange in order steps in reconciling bank statements.
19. Describe handling of petty cash.
20. Distinguish between types of insurance programs.
21. State points to remember when handling insurance forms.
22. Select from a list basic information found on an insurance claim.
23. Compose collection letters.
24. Complete ledger card, receipt, and daily log/journal page.
25. Practice pegboard system.
26. Balance daily log in pegboard system.
27. Figure courtesy discounts.
28. Prepare a bank deposit.
29. Prepare monthly expense sheet.
30. Prepare yearly summary sheet.
31. Prepare record of employees' salaries and tax deductions.
32. Write a check and complete check stub.
33. Reconcile bank statement.
34. Complete petty cash summary.
35. Complete insurance form.

DENTAL ACCOUNTING
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide student with objective sheet.

   B. Provide student with information and assignment sheets.

   C. Make transparencies.

   D. Order film.

   E. Discuss unit and specific objectives.

   F. Provide student with materials for assignment sheets.

   G. Demonstrate and discuss assignment sheets.

   H. Provide sample collection letters for students to use with Assignment Sheet #1. Discuss types of collection letters, then have students type them in block or semi-blocked form to increase their typing speed; this will also give students a chance to practice form letters.

   I. Teach students bookkeeping process using a credit card, if it is used in your area.

   J. Invite a bank employee to speak with students.

      Examples: Writing checks, making deposits, methods of routing checks from one bank to another

   K. Lead a discussion on handling checks returned due to insufficient funds.

   L. Discuss bank charge for returned checks.

   M. Have students go to post office and get form to be completed for Social Security number if they do not already have one.

   N. Invite a person who prepares income tax forms to speak with the students on forms they will need to fill out.

      Examples: Taxes taken out of salary; preparing income tax forms

   O. Obtain Federal and Social Security tax tables for use with assignment sheets.

   P. Contact companies who produce pegboard system to demonstrate the pegboard system. Most of the time they will provide samples.

   Q. Invite health insurance representative to discuss filling out insurance forms.

R. Take students on field trip to small claims court.

S. Give test.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Transparency Master: TM 1--Petty Cash Summary

D. Assignment sheets

1. Assignment Sheet #1--Compose Collection Letters
2. Assignment Sheet #2--Complete Ledger Card, Receipt, and Daily Log/Journal
3. Assignment Sheet #3--Practice Pegboard System
4. Assignment Sheet #4--Balance Daily Log in Pegboard System
5. Assignment Sheet #5--Figure Courtesy Discounts
6. Assignment Sheet #6--Prepare a Bank Deposit
7. Assignment Sheet #7--Prepare Monthly Expense Sheet
8. Assignment Sheet #8--Prepare Yearly Summary Sheet
9. Assignment Sheet #9--Prepare Record of Employees' Salaries and Tax Deductions
10. Assignment Sheet #10--Write a Check and Complete Check Stub
11. Assignment Sheet #11--Reconcile Bank Account
12. Assignment Sheet #12--Complete Petty Cash Summary
13. Assignment Sheet #13--Complete Insurance Form

D. Test

E. Answers to test

III. Unit references:

A. Ladley, Betty A., and Patt, Jerry Crowe. *Office Procedures for the Dental Team.* St. Louis: C.V. Mosby Co., 1977.

B. Ehrlich, Ann. *Business Administration for the Dental Assistant.* 2nd ed., Champaign: Colwell Systems, Inc., 1972.

C. Carpenter, Corrine K., and Volpe, Margaret E. *Workbook for Dental Records.* New Jersey State Department of Education, 1972.

D. Cooper, Marian G., Bredow, Miriam. *The Medical Assistant,* 4th ed., New York: McGraw-Hill Book Co., 1978.

E. Cunningham, Harold. *The 30 Best Collection Letters With Proven Results.* Financial Business Systems, 1975.

F. Serviss, Emalee. *Banking and Savings and Loan.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074.

DENTAL ACCOUNTING
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Business procedures--System of recording and summarizing all financial transactions

B. Accounts receivable--Involves management of all fees charged and payments received

C. Accounts payable--Involves management of all expenses paid out for operation of an office

D. Charge slip--Form showing patient's name, services rendered, and fee charged

(NOTE: In some offices the ledger card is used in place of a charge slip.)

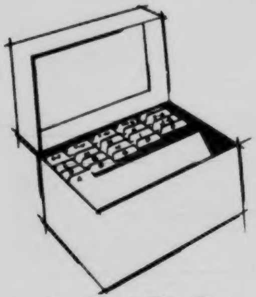
E. Receipt--Acknowledgement for cash paid; written in duplicate

F. Statement--Form showing amount owed; usually sent out the last of each month

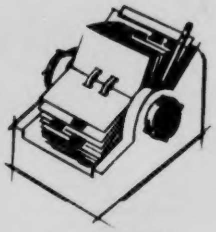
G. Ledger--Permanent individual patient form that shows charges, payments, services rendered, and balance due

(NOTE: Various ways of managing ledgers include index cards filed in boxes or on wheels, visible sliding trays, self-files, looseleaf or bound books.)

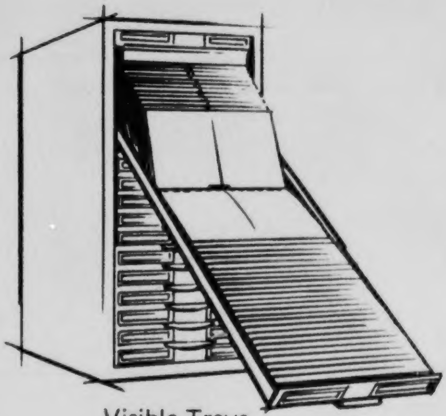
Examples:



Index Card File Box



Rotary File



Visible Trays

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INFORMATION SHEET

H. Daily log/journal--Permanent record that shows all patients' names, services rendered, total fees charged, and payments received

I. Monthly expense sheet--Permanent record of all expenditures for any given month

J. Yearly summary sheet--Permanent record showing each month's expenditures, charges and receipts, and yearly total for each (Assignment Sheet #8)

K. Bank deposit--Total amount of cash and checks prepared for safekeeping

L. Deposit slip--Itemized list of cash and other funds which depositors present for credit to their accounts

M. Endorsement--Signature on an official document

N. Account age--Refers to length of time that charges are overdue

(NOTE: Unless arrangements have been made to pay account before 30 days, a regular statement will be sent.)

O. Petty cash--Money used for miscellaneous office expenses

P. Health insurance-Financial coverage purchased through various companies to assist in payment of unexpected health expenses

Q. Social Security card--Numbered identification card given to individual after completing an application; used by employers and the Social Security Administration as a reference in the contributing of funds for social insurance

(NOTE: When earnings stop or person retires, monthly cash benefits are paid back to replace part of the earnings the person or family has lost.)

R. Employer identification number--Number assigned to employer by Internal Revenue Service, to be used in accounting process

INFORMATION SHEET

S. Employee's earning record--Summary of employee's earnings, to be recorded quarterly for office files or reporting to government

EARNINGS RECORD – SOCIAL SECURITY – WITHHOLDING

NAME **SOCIAL SEC. NO.** **EXEMPTIONS**

DATE PAID	PERIOD PAID FOR			WITHHOLDING		O.A.B.		OTHER WITHHOLDING				NET PAID	
TOTAL JAN.													
TOTAL FEB													
TOTAL MAR													
TOTAL 1st QTR.													
TOTAL APRIL													
TOTAL MAY													
TOTAL JUNE													
TOTAL 2nd QTR.													
TOTAL HALF YEAR													

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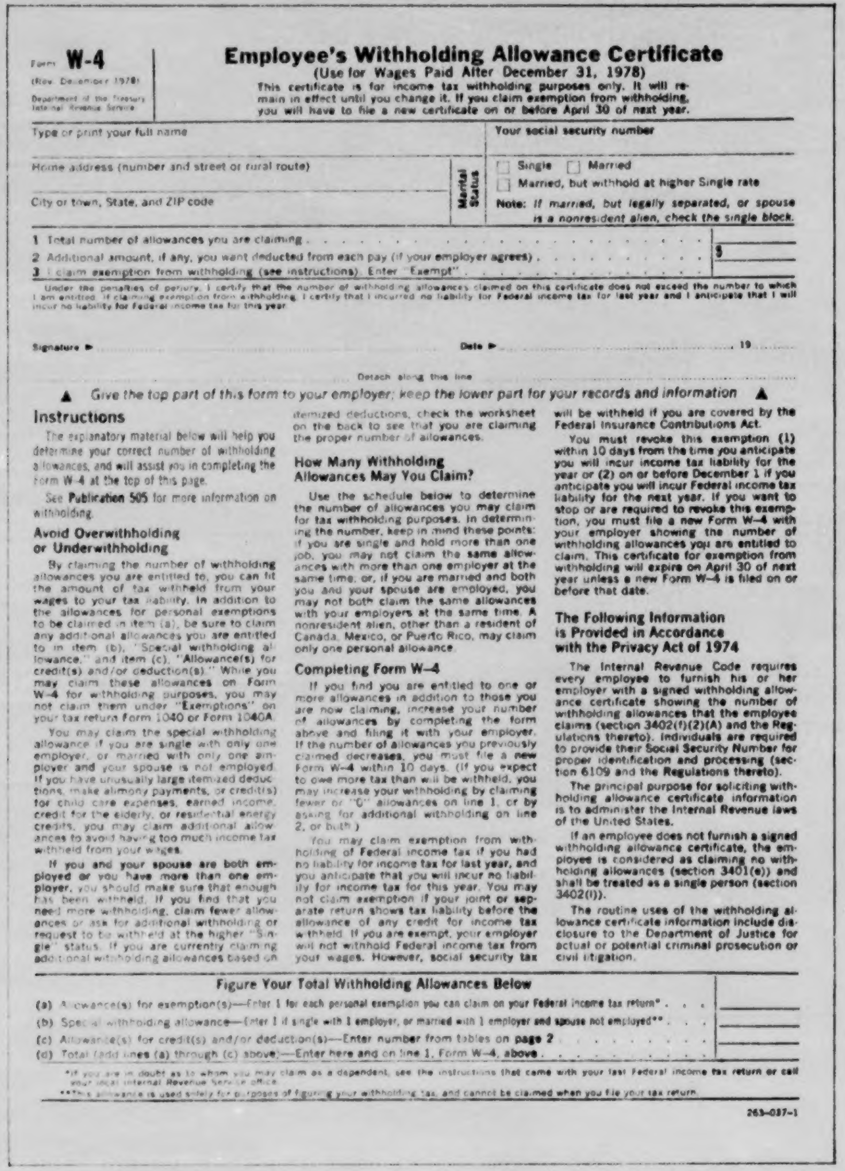
INFORMATION SHEET

T. Employee's withholding certificate (Form W-4)--Completed by employee to determine withholding allowances for income tax purposes



Form **W-4**
(Rev. December 1978)
Department of the Treasury
Internal Revenue Service

Employee's Withholding Allowance Certificate

(Use for Wages Paid After December 31, 1978)

This certificate is for income tax withholding purposes only. It will remain in effect until you change it. If you claim exemption from withholding, you will have to file a new certificate on or before April 30 of next year.

Type or print your full name
Your social security number
Home address (number and street or rural route)
City or town, State, and ZIP code
Marital Status ☐ Single ☐ Married
☐ Married, but withhold at higher Single rate
Note: *If married, but legally separated, or spouse is a nonresident alien, check the single block.*

1 Total number of allowances you are claiming . . . .
2 Additional amount, if any, you want deducted from each pay (if your employer agrees) . . . . $
3 I claim exemption from withholding (see instructions). Enter "Exempt" . . . .

Under the penalties of perjury, I certify that the number of withholding allowances claimed on this certificate does not exceed the number to which I am entitled. If claiming exemption from withholding, I certify that I incurred no liability for Federal income tax for last year and I anticipate that I will incur no liability for Federal income tax for this year.

Signature ► .... **Date ►** .... 19........

Detach along this line

▲ *Give the top part of this form to your employer; keep the lower part for your records and information* ▲

Instructions

The explanatory material below will help you determine your correct number of withholding allowances, and will assist you in completing the Form W-4 at the top of this page.

See **Publication 505** for more information on withholding.

Avoid Overwithholding or Underwithholding

By claiming the number of withholding allowances you are entitled to, you can fit the amount of tax withheld from your wages to your tax liability. In addition to the allowances for personal exemptions to be claimed in item (a), be sure to claim any additional allowances you are entitled to in item (b), "Special withholding allowance," and item (c), "Allowance(s) for credit(s) and/or deduction(s)." While you may claim these allowances on Form W-4 for withholding purposes, you may not claim them under "Exemptions" on your tax return Form 1040 or Form 1040A.

You may claim the special withholding allowance if you are single with only one employer, or married with only one employer and your spouse is not employed. If you have unusually large itemized deductions, make alimony payments, or credit(s) for child care expenses, earned income credit for the elderly, or residential energy credits, you may claim additional allowances to avoid having too much income tax withheld from your wages.

If you and your spouse are both employed or you have more than one employer, you should make sure that enough has been withheld. If you find that you need more withholding, claim fewer allowances or ask for additional withholding or request to be withheld at the higher "Single" status. If you are currently claiming additional withholding allowances based on itemized deductions, check the worksheet on the back to see that you are claiming the proper number of allowances.

How Many Withholding Allowances May You Claim?

Use the schedule below to determine the number of allowances you may claim for tax withholding purposes. In determining the number, keep in mind these points: if you are single and hold more than one job, you may not claim the same allowances with more than one employer at the same time; or, if you are married and both you and your spouse are employed, you may not both claim the same allowances with your employers at the same time. A nonresident alien, other than a resident of Canada, Mexico, or Puerto Rico, may claim only one personal allowance.

Completing Form W-4

If you find you are entitled to one or more allowances in addition to those you are now claiming, increase your number of allowances by completing the form above and filing it with your employer. If the number of allowances you previously claimed decreases, you must file a new Form W-4 within 10 days. (If you expect to owe more tax than will be withheld, you may increase your withholding by claiming fewer or "0" allowances on line 1, or by asking for additional withholding on line 2, or both.)

You may claim exemption from withholding of Federal income tax if you had no liability for income tax for last year, and you anticipate that you will incur no liability for income tax for this year. You may not claim exemption if your joint or separate return shows tax liability before the allowance of any credit for income tax withheld. If you are exempt, your employer will not withhold Federal income tax from your wages. However, social security tax will be withheld if you are covered by the Federal Insurance Contributions Act.

You must revoke this exemption (1) within 10 days from the time you anticipate you will incur income tax liability for the year or (2) on or before December 1 if you anticipate you will incur Federal income tax liability for the next year. If you want to stop or are required to revoke this exemption, you must file a new Form W-4 with your employer showing the number of withholding allowances you are entitled to claim. This certificate for exemption from withholding will expire on April 30 of next year unless a new Form W-4 is filed on or before that date.

The Following Information is Provided in Accordance with the Privacy Act of 1974

The Internal Revenue Code requires every employee to furnish his or her employer with a signed withholding allowance certificate showing the number of withholding allowances that the employee claims (section 3402(f)(2)(A) and the Regulations thereto). Individuals are required to provide their Social Security Number for proper identification and processing (section 6109 and the Regulations thereto).

The principal purpose for soliciting withholding allowance certificate information is to administer the Internal Revenue laws of the United States.

If an employee does not furnish a signed withholding allowance certificate, the employee is considered as claiming no withholding allowances (section 3401(e)) and shall be treated as a single person (section 3402(l)).

The *routine* uses of the withholding allowance certificate information include disclosure to the Department of Justice for actual or potential criminal prosecution or civil litigation.

Figure Your Total Withholding Allowances Below

(a) Allowance(s) for exemption(s)—Enter 1 for each personal exemption you can claim on your Federal income tax return* . . . ________
(b) Special withholding allowance—Enter 1 if single with 1 employer, or married with 1 employer and spouse not employed** . . . ________
(c) Allowance(s) for credit(s) and/or deduction(s)—Enter number from tables on **page 2** . . . . ________
(d) Total (add lines (a) through (c) above)—Enter here and on line 1, Form W-4, **above** . . . . ________

*If you are in doubt as to whom you may claim as a dependent, see the instructions that came with your last Federal income tax return or call your local Internal Revenue Service office.

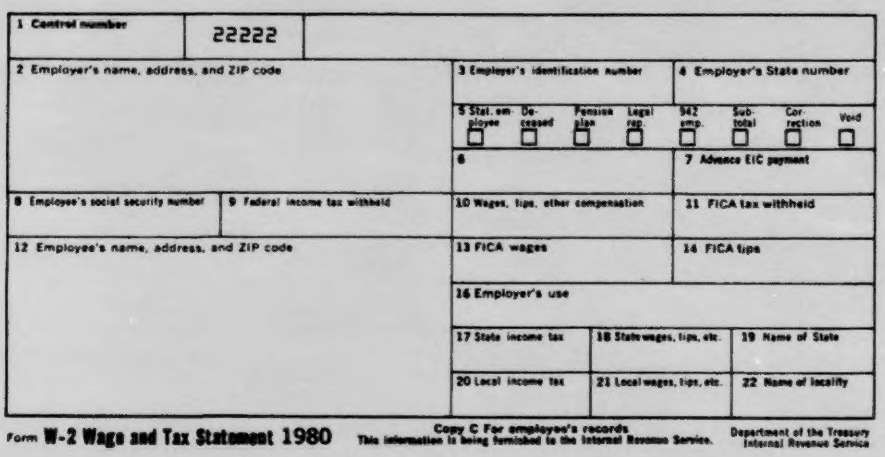
**This allowance is used solely for purposes of figuring your withholding tax, and cannot be claimed when you file your tax return.

263-037-1

INFORMATION SHEET

U. Wage and tax statement (Form W-2)--Total of all wages paid and deductions withheld from the employee, to be used in filing income tax

(NOTE: This form for a calendar year is provided for each employee no later than January 31st of the following year.)



1 Control number 22222

2 Employer's name, address, and ZIP code

3 Employer's identification number

4 Employer's State number

5 Stat. employee ☐ Deceased ☐ Pension plan ☐ Legal rep. ☐ 942 emp. ☐ Subtotal ☐ Correction ☐ Void ☐

6

7 Advance EIC payment

8 Employee's social security number

9 Federal income tax withheld

10 Wages, tips, other compensation

11 FICA tax withheld

12 Employee's name, address, and ZIP code

13 FICA wages

14 FICA tips

16 Employer's use

17 State income tax

18 State wages, tips, etc.

19 Name of State

20 Local income tax

21 Local wages, tips, etc.

22 Name of locality

Form **W-2 Wage and Tax Statement 1980**

Copy C For employee's records
This information is being furnished to the Internal Revenue Service.

Department of the Treasury
Internal Revenue Service

V. Federal unemployment tax--Type of payment that doctor makes if he or she employs more than four people

(NOTE: The tax is a percentage of wages paid and applies to a certain amount of wages paid during the calendar year. This tax must be computed on a quarterly basis and a deposit should be made each month. The specified amount changes from year to year. Obtain a copy of projected changes from your local Social Security office.)

W. Workmen's compensation insurance--Reimburses an employer for damages paid to an employee who has been hurt on the job

X. Federal Truth in Lending Act--Law passed to inform consumers of the cost of borrowing and purchasing on credit

II. Responsibilities of the bookkeeping assistant

A. Develop an accurate routine system of keeping accounts

B. Give complete and careful attention to every detail

C. Provide accurate account of records and money involved

INFORMATION SHEET

D. Show ethical responsibility when handling confidential information

(NOTE: Under no circumstances should you violate that trust; do not discuss with anyone, except your doctor, matters relating to the office practice.)

Example: "Did you know the Hefners have not paid on their account for three months and they owe the doctor $500.00? I think we are going to have to turn them over to the collection agency."

III. Ways in which patients' accounts are handled

A. Patients pay cash

B. Billed monthly

C. Bills sent as soon as patient is discharged

D. Patients pay fixed amount weekly or monthly

(NOTE: Fixed amount will be paid regardless of charges made in that week or month.)

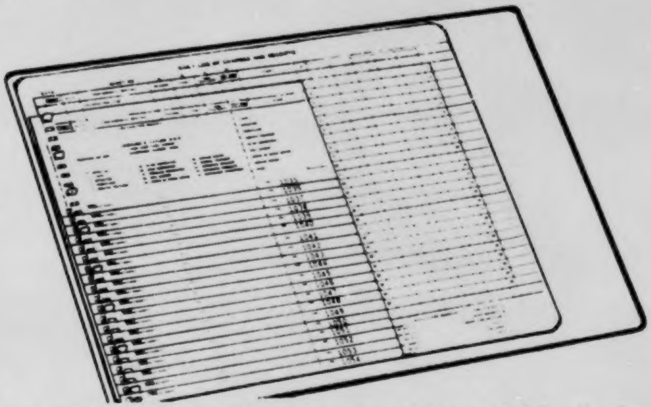
E. Credit cards

F. Health insurance

IV. Types of bookkeeping systems

A. Traditional log system--Requires separate written entries on a ledger card, daily receipt, and log sheet

B. Pegboard (Write-it-once)--Provides in one writing entry on charge slip, daily journal, ledger card, receipt, appointment notice, and in some instances a statement



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INFORMATION SHEET

C. Data processing--Involves use of computers and codes for procedures

Example: AM-Amalgam

V. Steps to follow through a collection system (Assignment Sheet #1)

ACCOUNT AGE	COLLECTION ACTION
End of the month or 30 days	Send the usual statement; this account is not yet overdue
60 days	Mail a second statement with a gently phrased reminder added by hand or typed. A pre-printed card, form letter, or sticker are easier but less effective alternatives
74 days	Make the first telephone contact with the responsible person
90 days	Send a stronger letter or collection form, definitely asking for prompt attention (NOTE: If no response is received, the account will be turned over to a collection agency. If the amount due is $20.00 or more, the case can be taken to small claims court.)

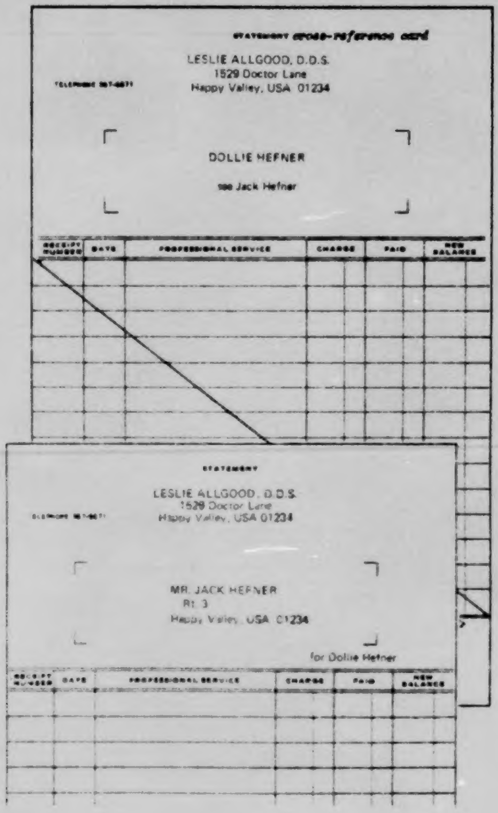
INFORMATION SHEET

VI. Items listed on charge slip and ledger (Assignment Sheet #2)

A. Date

B. Complete name, including first and middle names

(NOTE: Name shown at the top of the slip will be the person responsible for the account. Spouse's name is used for cross-reference.)



LESLIE ALLGOOD, D.D.S.
1529 Doctor Lane
Happy Valley, USA 01234

DOLLIE HEFNER

see Jack Hefner

LESLIE ALLGOOD, D.D.S.
1529 Doctor Lane
Happy Valley, USA 01234

MR. JACK HEFNER
Rt. 3
Happy Valley, USA 01234

for Dollie Hefner

C. Patient's address

D. Services rendered

(NOTE: This information may be written out or coded according to system being used.)

E. Itemized charges for services rendered

F. Total amount

(NOTE: Some of the systems may show the total charge amount, the amount paid, and the new balance.)

INFORMATION SHEET

VII. Steps in using the daily log/journal page (Assignment Sheet #2)

A. Enter information and charges from charge slip to patient ledger card during each visit

B. Enter information from patient ledger card to daily log/journal page

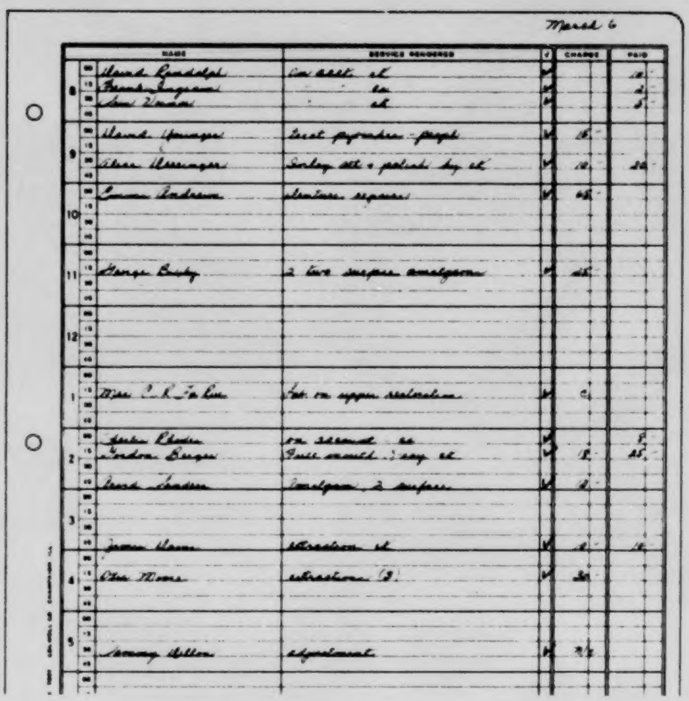
(NOTE: When a series of visits will be needed for a specific service, the total fee is charged in full at the first visit. A "C" for *charged* or *contract* is listed in the charge column and payments are listed in the *paid* column.)

Example: Orthodontist's long range contract

C. Enter any payment received on account on the individual ledger cards, then on daily journal pages as "on account"

D. Place a check mark in column by name to indicate that information has been transferred to ledger card

Example:



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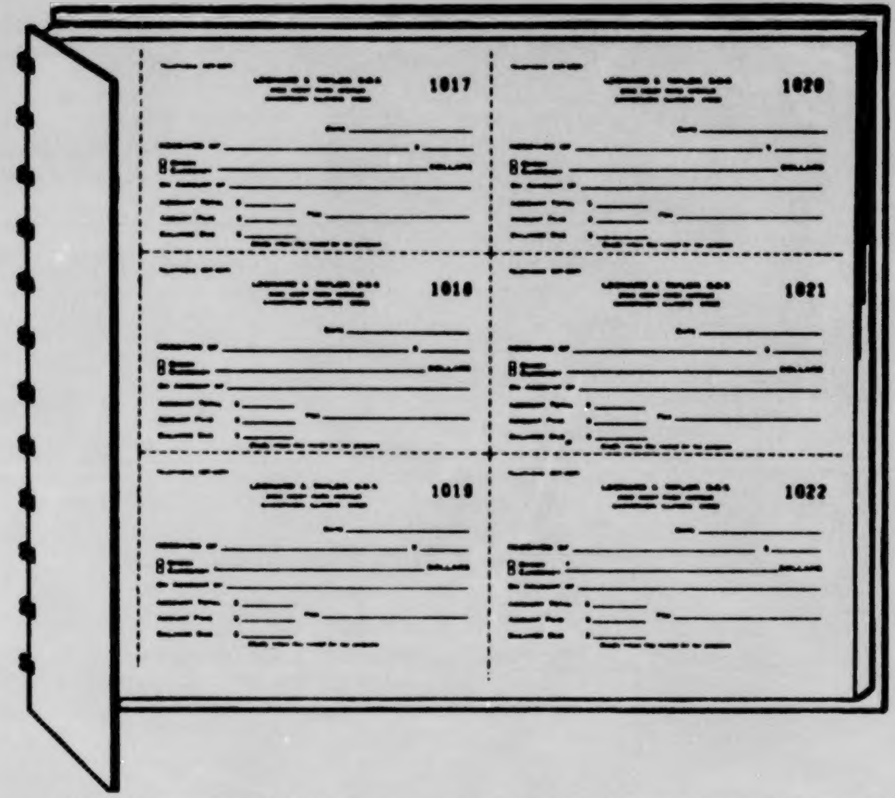
INFORMATION SHEET

E. Give a receipt for payment if requested



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(NOTE: Some offices use receipts as a double check in bookkeeping system.)

VIII. Balancing daily log/journal page

A. Check appointment book to see that all patients' visits have been listed in daily log/journal page

B. Make sure that there is a check mark for each entry

C. Total charge column for amount of day's production

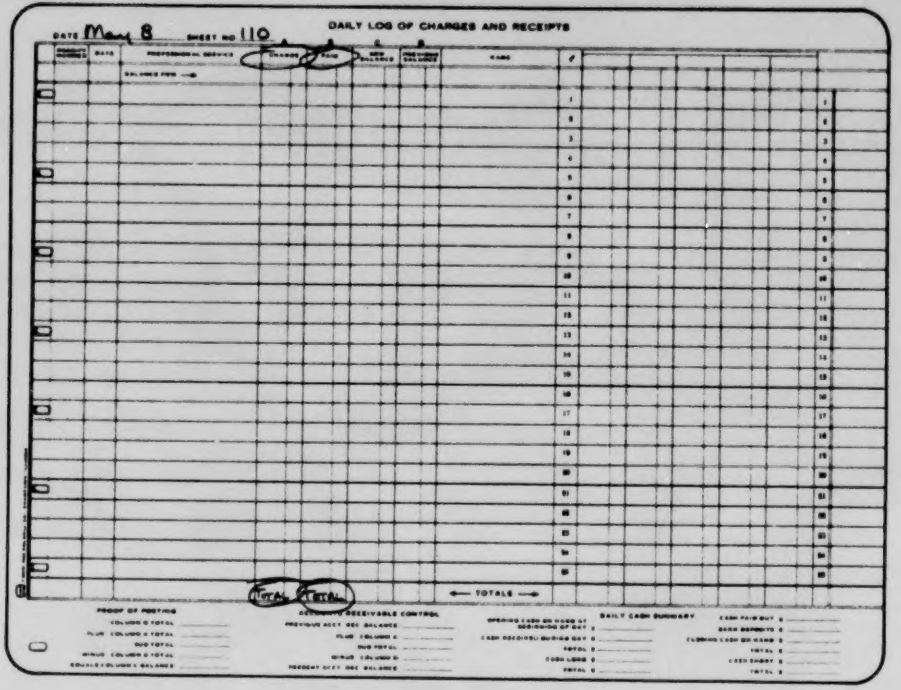
D. Total paid column

(NOTE: This sum should equal the amount of checks and currency to be deposited daily.)

INFORMATION SHEET

E. Bring totals from the charge and paid columns forward to next page for balance forward

Example:



DATE May 8 SHEET NO 110

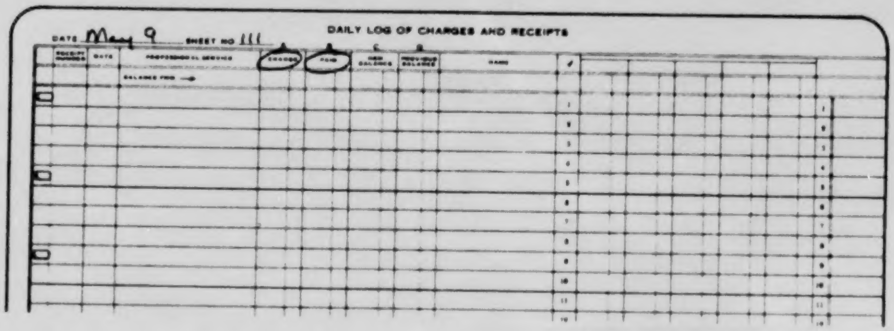
DAILY LOG OF CHARGES AND RECEIPTS

TOTAL TOTAL

← TOTALS →

PROOF OF POSTING

DAILY CASH SUMMARY



DATE May 9 SHEET NO 111

DAILY LOG OF CHARGES AND RECEIPTS

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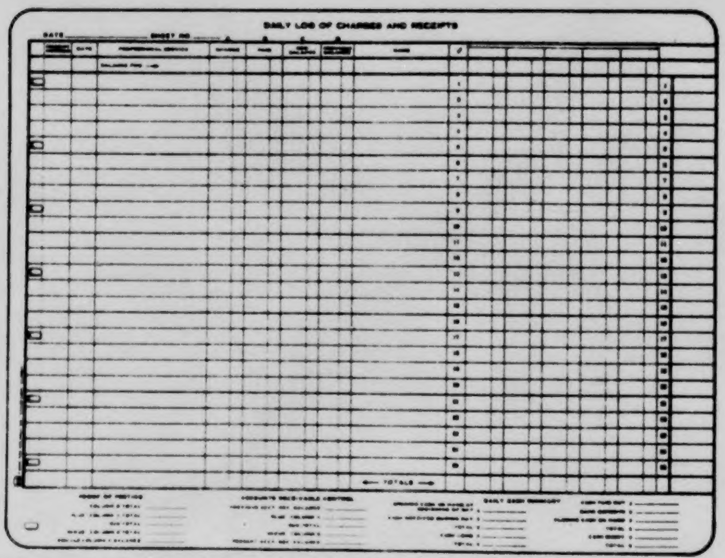
INFORMATION SHEET

IX. Parts of pegboard system (Assignment Sheet #3)

A. Fold-a-log pegboard

(NOTE: The pegboard is usually made of lightweight aluminum or plastic and has a row of pegs along the left side of board to hold sheets secure.)

B. Daily log of charges and receipts (daily journal page)



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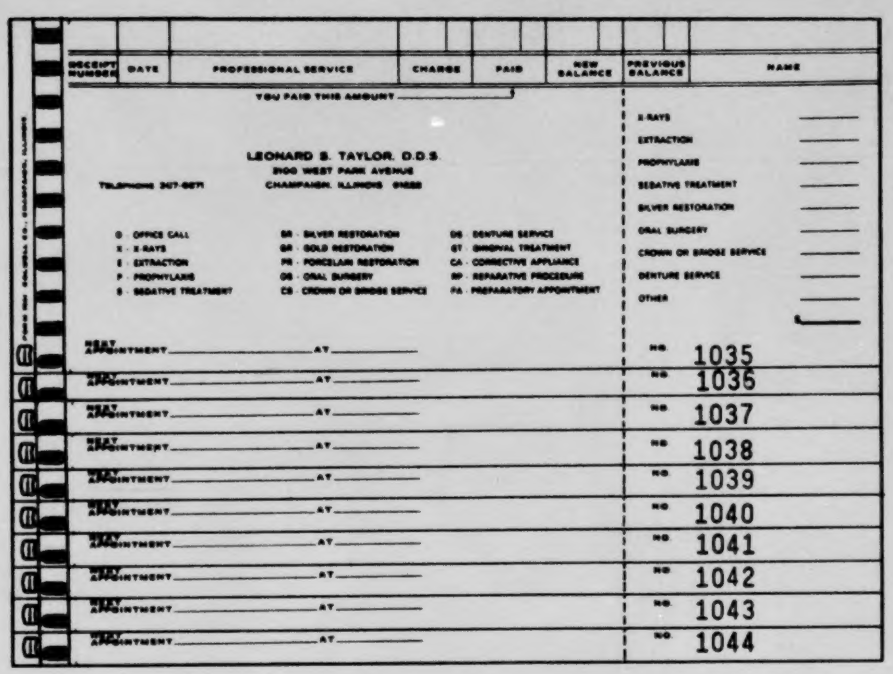
INFORMATION SHEET

C. Receipt and charge slip

(NOTE: The receipt also can be used to make the next appointment notice.)



RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE	PAID	NEW BALANCE	PREVIOUS BALANCE	NAME

YOU PAID THIS AMOUNT ____

LEONARD S. TAYLOR, D.D.S.
2100 WEST PARK AVENUE
CHAMPAIGN, ILLINOIS [illegible]

TELEPHONE [illegible]

O - OFFICE CALL
X - X-RAYS
E - EXTRACTION
P - PROPHYLAXIS
S - SEDATIVE TREATMENT

SR - SILVER RESTORATION
GR - GOLD RESTORATION
PR - PORCELAIN RESTORATION
OS - ORAL SURGERY
CB - CROWN OR BRIDGE SERVICE

DS - DENTURE SERVICE
GT - GINGIVAL TREATMENT
CA - CORRECTIVE APPLIANCE
RP - REPARATIVE PROCEDURE
PA - PREPARATORY APPOINTMENT

X-RAYS ____
EXTRACTION ____
PROPHYLAXIS ____
SEDATIVE TREATMENT ____
SILVER RESTORATION ____
ORAL SURGERY ____
CROWN OR BRIDGE SERVICE ____
DENTURE SERVICE ____
OTHER ____
$ ____

NEXT APPOINTMENT ____ AT ____ NO. 1035
NEXT APPOINTMENT ____ AT ____ NO. 1036
NEXT APPOINTMENT ____ AT ____ NO. 1037
NEXT APPOINTMENT ____ AT ____ NO. 1038
NEXT APPOINTMENT ____ AT ____ NO. 1039
NEXT APPOINTMENT ____ AT ____ NO. 1040
NEXT APPOINTMENT ____ AT ____ NO. 1041
NEXT APPOINTMENT ____ AT ____ NO. 1042
NEXT APPOINTMENT ____ AT ____ NO. 1043
NEXT APPOINTMENT ____ AT ____ NO. 1044

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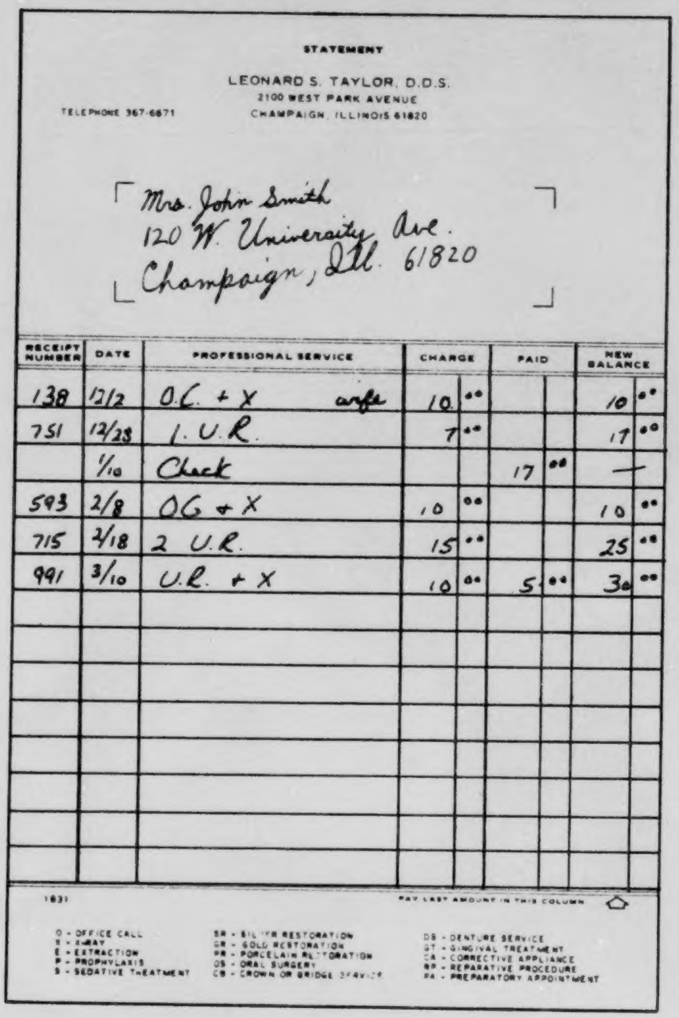
INFORMATION SHEET

D. Ledger card



STATEMENT

LEONARD S. TAYLOR, D.D.S.
2100 WEST PARK AVENUE
CHAMPAIGN, ILLINOIS 61820

TELEPHONE 367-6871

Mrs. John Smith
120 W. University Ave.
Champaign, Ill. 61820

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE		PAID		NEW BALANCE	
138	12/2	O.C. + X arfe	10.	00			10	00
751	12/28	1. U.R.	7	00			17	00
	1/10	Check			17	00	—	
593	2/8	OG + X	10	00			10	00
715	2/18	2 U.R.	15	00			25	00
991	3/10	U.R. + X	10	00	5	00	30	00

1831

PAY LAST AMOUNT IN THIS COLUMN ⇧

O - OFFICE CALL
X - X-RAY
E - EXTRACTION
P - PROPHYLAXIS
S - SEDATIVE TREATMENT

SR - SILVER RESTORATION
GR - GOLD RESTORATION
PR - PORCELAIN RESTORATION
OS - ORAL SURGERY
CB - CROWN OR BRIDGE SERVICE

DS - DENTURE SERVICE
GT - GINGIVAL TREATMENT
CA - CORRECTIVE APPLIANCE
RP - REPARATIVE PROCEDURE
PA - PREPARATORY APPOINTMENT

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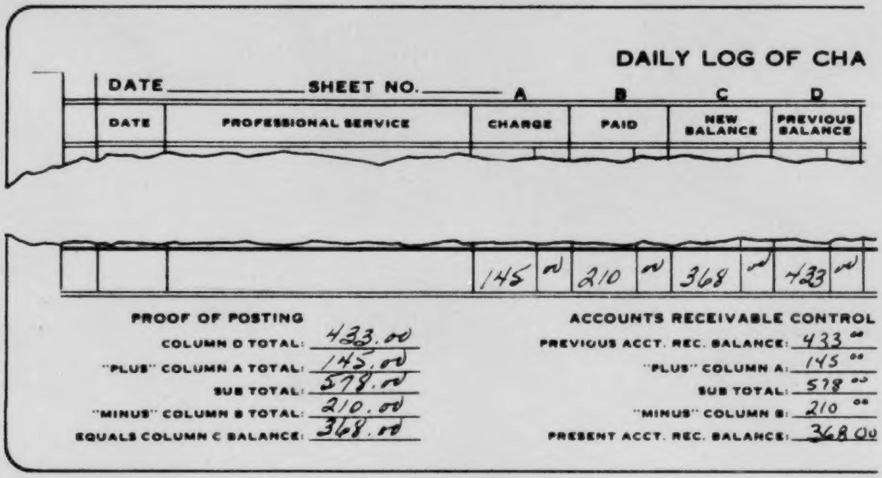
INFORMATION SHEET

X. Methods of balancing daily log/journal page in pegboard system (Assignment Sheet #4)

(NOTE: This is a double check for you to see if your figures balance.)

A. Proof of posting

B. Accounts receivable control



DAILY LOG OF CHA

DATE ____________ SHEET NO. ________

		A		B		C		D	
DATE	PROFESSIONAL SERVICE	CHARGE		PAID		NEW BALANCE		PREVIOUS BALANCE	
		145	00	210	00	368	00	433	00

PROOF OF POSTING

COLUMN D TOTAL: 433.00

"PLUS" COLUMN A TOTAL: 145.00

SUB TOTAL: 578.00

"MINUS" COLUMN B TOTAL: 210.00

EQUALS COLUMN C BALANCE: 368.00

ACCOUNTS RECEIVABLE CONTROL

PREVIOUS ACCT. REC. BALANCE: 433 00

"PLUS" COLUMN A: 145 00

SUB TOTAL: 578 00

"MINUS" COLUMN B: 210 00

PRESENT ACCT. REC. BALANCE: 368.00

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(NOTE: These columns will be found at the bottom of each daily log of charges sheet.)

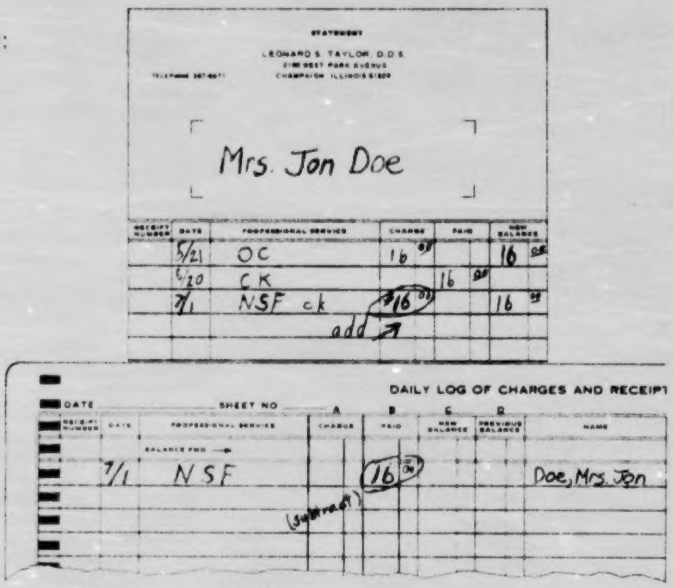
INFORMATION SHEET

XI. Special entries in bookkeeping systems (Assignment Sheet #5)

(NOTE: In every office there is a special noting system to keep records of these entries.)

A. Non-sufficient funds (NSF)--Check returned by bank due to lack of funds in account

Example:



STATEMENT

LEONARD S. TAYLOR, D.D.S.
2100 WEST PARK AVENUE
CHAMPAIGN, ILLINOIS 61820

TELEPHONE 367-6671

Mrs. Jon Doe

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE	PAID	NEW BALANCE
	5/21	OC	16 00		16 00
	6/20	CK		16 00	
	7/1	NSF ck	$16 00		16 00
		add			

DAILY LOG OF CHARGES AND RECEIPT

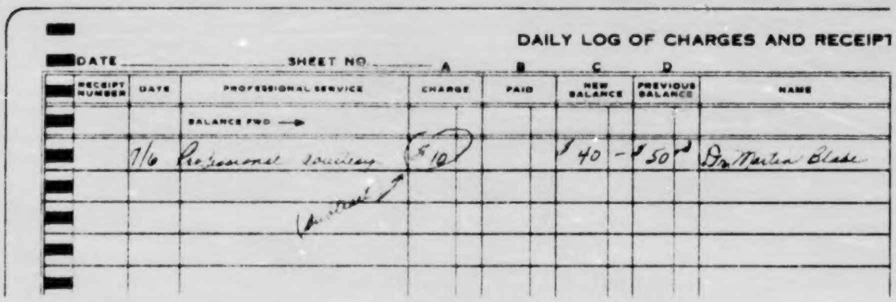
DATE ________ SHEET NO. ______

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	A CHARGE	B PAID	C NEW BALANCE	D PREVIOUS BALANCE	NAME
		BALANCE FWD →					
	7/1	NSF		16 00			Doe, Mrs. Jon
			(subtract)				

B. Courtesy discount--Special fee given to selected patients or professionals

(NOTE: A predetermined percentage of the usual fee will be subtracted from amount paid.)

Example:



DAILY LOG OF CHARGES AND RECEIPT

DATE ________ SHEET NO. ______

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	A CHARGE	B PAID	C NEW BALANCE	D PREVIOUS BALANCE	NAME
		BALANCE FWD →					
	7/6	Professional courtesy	$10		$40 -	$50 00	Dr. Martin Blade
		(subtract)					

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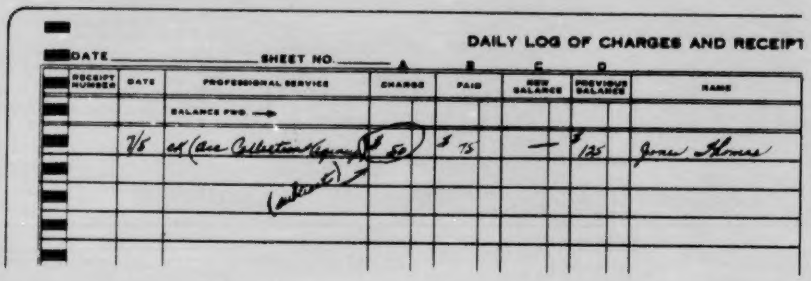
INFORMATION SHEET

C. Collection agency payment--Money received from business hired to collect overdue accounts

Example:



DAILY LOG OF CHARGES AND RECEIPT

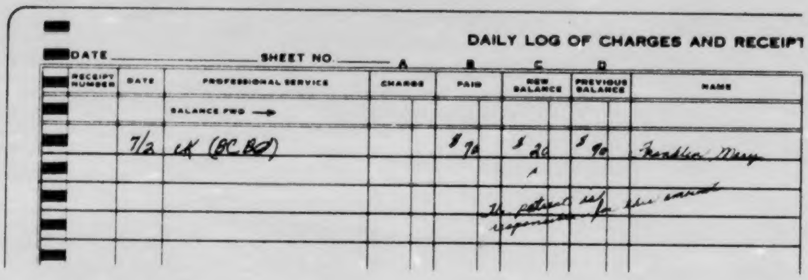
DATE ______________ SHEET NO. ______

			A	B	C	D	
RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE	PAID	NEW BALANCE	PREVIOUS BALANCE	NAME
		BALANCE FWD →					
	7/5	ck (see Collection Agency) $50 (amount)		$75	—	$125	Jones Homer

(NOTE: When account is turned over to an agency for collection, a percentage of the money will be kept by the agency.)

D. Insurance claims--Partial or full payment to office from patient's coverage

Example:



DAILY LOG OF CHARGES AND RECEIPT

DATE ______________ SHEET NO. ______

			A	B	C	D	
RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE	PAID	NEW BALANCE	PREVIOUS BALANCE	NAME
		BALANCE FWD →					
	7/2	ck (BCBS)		$70	$20	$90	Franklin Mary
					The patient is responsible for this amount		

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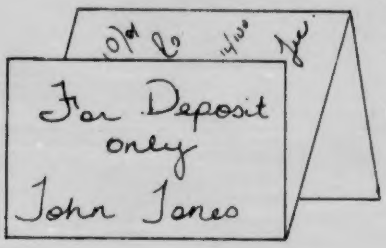
INFORMATION SHEET

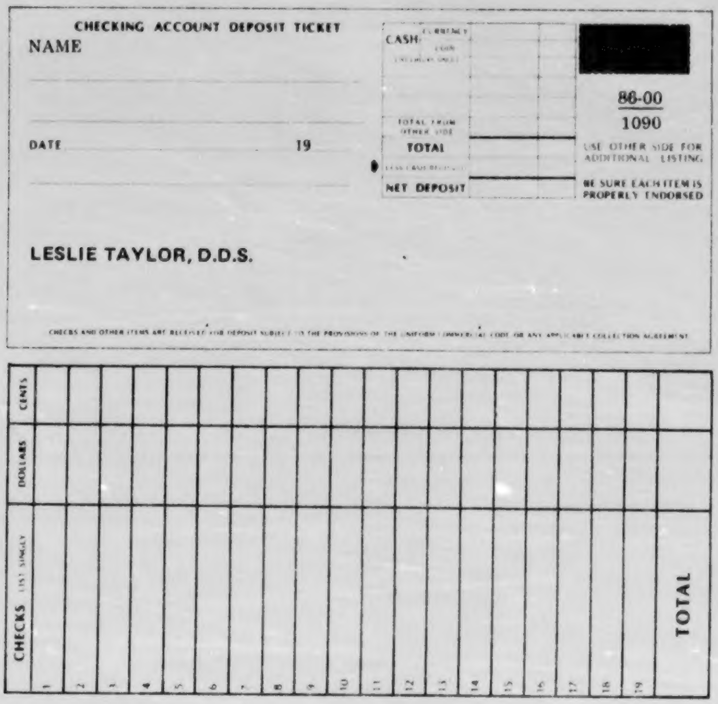
XII. Steps in making a bank deposit (Assignment Sheet #6)

A. Endorse backs of checks on left end

(NOTE: It is best to use a restrictive endorsement that states *for deposit only* to the account of doctor's name. A stamp with necessary information can be used to save time.)



B. Make out deposit slip with correct date, doctor's name, and itemized amount and total to be deposited



CHECKING ACCOUNT DEPOSIT TICKET

NAME

DATE 19

CASH CURRENCY

COIN

TOTAL FROM OTHER SIDE

TOTAL

NET DEPOSIT

[redacted]

86-00
1090

USE OTHER SIDE FOR ADDITIONAL LISTING

BE SURE EACH ITEM IS PROPERLY ENDORSED

LESLIE TAYLOR, D.D.S.

CHECKS AND OTHER ITEMS ARE RECEIVED FOR DEPOSIT SUBJECT TO THE PROVISIONS OF THE UNIFORM COMMERCIAL CODE OR ANY APPLICABLE COLLECTION AGREEMENT

CHECKS LIST SINGLY	DOLLARS	CENTS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
TOTAL		

INFORMATION SHEET

XIII. Items that appear on monthly expense sheet (Assignment Sheet #7)

(NOTE: Items listed below are common in almost every office; other items may be included depending on doctor's preference. The monthly totals will be entered on the yearly summary sheet.)

A. Clinical supplies

B. Office supplies

C. Laboratory fees

D. Utilities

E. Laundry

F. Office payment and upkeep

G. Salaries

H. Miscellaneous

XIV. Items found on record of employees' salaries and tax deductions (Assignment Sheet #9)

A. Name of employee

B. Social Security number

C. Total exemptions

D. Dates and periods paid

E. Gross salary

(NOTE: This is total salary earned, before taxes.)

F. Federal income tax withheld

G. Social Security (FICA) tax withheld

H. Other payroll deductions

Examples: State income tax, unemployment insurance

I. Net salary

(NOTE: All employees should keep a record of the above information if not provided by the employer.)

INFORMATION SHEET

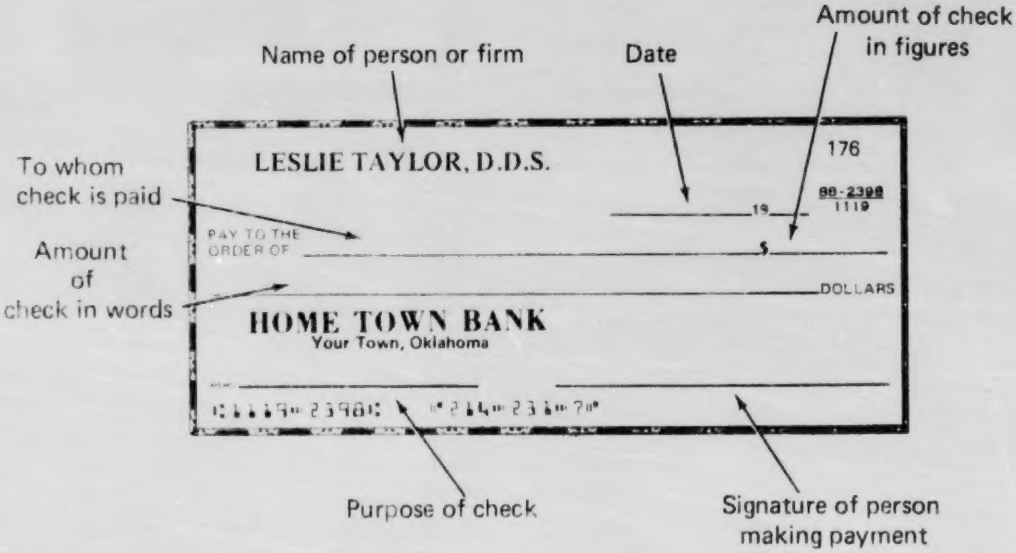
XV. Depositing withheld income tax and Social Security (FICA) taxes

A. Employer must deposit withheld income tax and Social Security taxes in an authorized commercial bank or Federal Reserve Bank

B. Internal Revenue Service will send a Federal Tax Deposit form 501 for reporting needed information

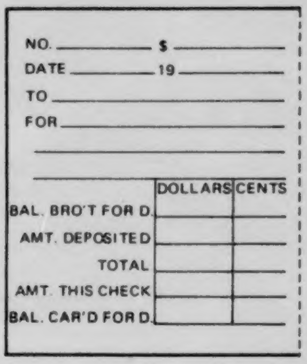
C. Even though monthly deposits are made, it is also necessary to file a quarterly report on form 941

XVI. Parts of a check (Assignment Sheet #10)


Name of person or firm
Date
Amount of check in figures
To whom check is paid
Amount of check in words
LESLIE TAYLOR, D.D.S.
176
19
88-2398
1119
PAY TO THE ORDER OF
$
DOLLARS
HOME TOWN BANK
Your Town, Oklahoma
Purpose of check
Signature of person making payment

INFORMATION SHEET

XVII. Items needed on check stub (Assignment Sheet #10)



NO. ________ $ ________

DATE ________ 19 ________

TO ________

FOR ________

	DOLLARS	CENTS
BAL. BRO'T FOR D.		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR D.		

A. Number of check

B. Amount of check

C. Date

D. To whom check is paid

E. Purpose of check

F. Balance brought forward

G. Amount deposited (if any)

H. Total

XVIII. Steps in reconciling bank statements (Assignment Sheet #11)

A. Verify amount of cancelled checks with amounts on bank statement

B. Arrange cancelled checks numerically

C. Compare amount of cancelled checks and deposits with amounts written in checkbook stub (register)

D. Check off (✓) all cancelled checks and deposits in the checkbook stub (register)

E. List outstanding checks (those not returned to bank) with check number and amount

(NOTE: If a deposit has been made that does not show on the bank statement, amount should be added to balance.)

INFORMATION SHEET

F. Subtract total amount of outstanding checks from statement balance

(NOTE: Other charges such as service charges, debit memo, and overdrafts will also need to be subtracted.)

G. Make sure that adjusted bank balance and adjusted checkbook balance are equal

XIX. Handling of petty cash (Transparency 1, Assignment Sheet #12)

A. Write check from office account for cash needed

(NOTE: Amount depends on office served; it is usually fifty dollars or less.)

B. Fill out a numbered voucher each time money is taken from fund

C. Balance amount of voucher and remaining cash to original amount of petty cash when fund is low or depleted

XX. Types of insurance programs

A. Private (non-profit or profit)

(NOTE: Many firms offer group and individual policies covering a variety of conditions.)

1. Commercial carriers

2. Professional organizations

Examples: Blue Cross and Blue Shield, Delta Dental Plan, American Vocational Association, Industrial Accident

B. Public programs (Government-operated)

1. Medicare

2. Medicaid

XXI. Points to remember when handling insurance forms

A. Know policies you see most often

B. Learn benefits that pertain to your office

C. Use a standard form when possible

D. Obtain insurance information during patient's first visit

Examples: Name of insurance company, type of policy, policy number

INFORMATION SHEET

E. Tell patient in advance when policy is not going to pay full fee

F. Find out who will receive money from insurance company

G. Use standard medical/dental terminology

H. File claims as quickly as possible

I. Follow up unpaid claims

J. Learn rules for special situations

(NOTE: Some doctors charge for filling out insurance claim forms, and ask for a small fee as a service charge.)

K. Call insurance company representative if you have questions

XXII. Basic information found on insurance claim (Assignment Sheet #13)

A. Initial information

Examples: Name, age, sex, employer, address, telephone number

B. Group number or claim number

C. Policyholder's name

(NOTE: Policyholder is the person who enrolled in the insurance program. The patient will be a family member who is covered by the policy.)

D. Relationship of patient to policyholder

E. Other health insurance coverage

F. Diagnosis/symptoms

(NOTE: This includes details of accident if needed, and whether or not injury was job-related.)

G. Description of services and charges

(NOTE: After form is completed doctor should review and sign insurance claim.)

Petty Cash Summary

PETTY CASH FUND		DATE	EXPLANATION	VOUCHER NO.	DISTRIBUTION OF PAYMENTS			
RECEIVED	PAID OUT				ADVERTISING EXPENSE	DELIVERY EXPENSE	MISC. EXPENSES	OFFICE EXPENSE

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DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #1--COMPOSE COLLECTION LETTERS

NAME_______________________________________ SCORE____________

The most sensitive area in the dental office is the follow-up procedure on accounts that are overdue. The approach you use may determine if you keep that patient or if they are a loss to the practice.

Most people are willing to pay their bills, but sometimes unexpected problems cause a temporary setback.

It is your job as a dental assistant to collect accounts. A telephone call or appropriate note at the time of billing is most effective. If this is not successful, then you must send collection letters.

(NOTE: Some patients will ignore all requests for payment. Then the accounts must be turned over to the collection agency of your doctor's choice.)

Study the sample letters on the next pages. Then compose collection letters for an overdue account for two and three months. Type in block or semi-blocked form.

Turn in to your instructor for a grade or exchange for class discussion.

ASSIGNMENT SHEET #1

SAMPLE STRONG COLLECTION LETTER

Leslie Allgood, D.D.S.
1529 Doctor's Lane
Happy Valley, USA 01234

January 15, 1980

Walter S. Simpson
4840 W. 15th St.
Happy Valley, USA 01234

IT'S HARD TO BELIEVE

. . . . .but many customers appreciate a reminder when their account becomes overdue.

Your current balance is $______________________________________

We hope to hear from you soon.

Sincerely,

Leslie Allgood, D.D.S.

Leslie Allgood, D.D.S.

LA/dh

ASSIGNMENT SHEET #1

SAMPLE STRONGER COLLECTION LETTER

Leslie Allgood, D.D.S.
1529 Doctor's Lane
Happy Valley, USA 01234

February 14, 1980

Walter S. Simpson
4840 W. 15th St.
Happy Valley, USA 01234

Dear Mr. Simpson:

Your account balance of $______________is long past due.

We hope this is merely an oversight on your part and that we will receive payment soon. If you need more time to pay your bill, please contact our office to make other arrangements. We will be happy to help you find a reasonable way to settle this situation.

Sincerely,

Leslie Allgood, D.D.S.

Leslie Allgood, D.D.S.

LA/dh

ASSIGNMENT SHEET #1

SAMPLE VERY FIRM COLLECTION LETTER

Leslie Allgood, D.D.S.
1529 Doctor's Lane
Happy Valley, USA 01234

March 31, 1980

Dear Mr. Simpson:

Your payment is now seriously overdue. Though we have sent you several invoices and two letters, your check has not been received. Neither have we had any explanation for your nonpayment.

Frankly, we dislike the thought of having to turn your account over to a collection agency. But unless we receive payment within ten days, we will be forced to take this drastic step. Wouldn't it be easier to settle your account?

Please write a check NOW, attach it to the enclosed invoice and mail it to us AT ONCE in the enclosed self-addressed-envelope so that the matter may be cleared immediately.

Sincerely,

Leslie Allgood, D.D.S.

Leslie Allgood, D.D.S.

LA/dh

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #2--COMPLETE LEDGER CARD, RECEIPT, AND DAILY LOG/JOURNAL PAGE

NAME____ SCORE____________

The dental assistant has the major responsibility for completing the ledger cards, receipts, and daily log/journal page correctly.

Use the following information to complete the ledger cards, receipts, and daily/log journal page on the next pages. Make sure the receipt numbers match those on the ledger cards.

May 25, 19-- 9:00 a.m.

Joyce Mabry came into office for complete X-ray survey.
Make out charge slip for X-rays--$27.00 She pays with a check for $27.00.

May 25, 19-- 10:00 a.m.

Wanda Mayfield came into office for Prophy and bitewings.
Make out charge slip for Prophy--$16.00 and bitewings--$12.00 She pays $24.00 in cash.

May 25, 19-- 11:00 a.m.

Sarah Bardesis came into office for Amalgam MOD and Removal of UR molar. Make out charge slip for Amal. MOD--$16.00 and EXT tooth #1--$16.00 She pays with a check for $32.00.

ASSIGNMENT SHEET #2

LEDGER CARDS

John Cavity, D.D.S., INC.
Jane Toothache, D.D.S., INC.
240 S. Western
Stillwater, Oklahoma 74074

372-1155

Joyce Mabry
Rt 2 Box 101
Stillwater, Okla. 74074

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE		PAID		NEW BALANCE	
	1/15	Prophy x-rays (wife)	37.	00			37.	00
25792	3/17	Partial repair (cash)	25	00	25	00	37.	00
25793	5/19	extraction	17	00			54	00
	5/21	pd. on account (ck.)			20	00	24.	00

1631

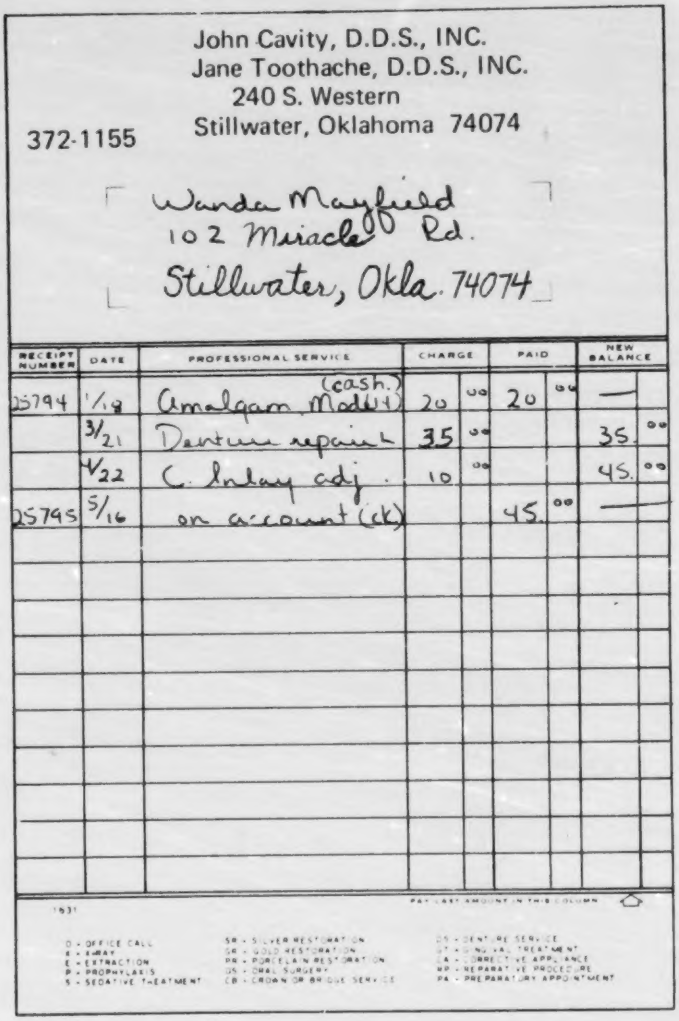
PAY LAST AMOUNT IN THIS COLUMN ⇧

O - OFFICE CALL
[illegible] - X-RAY
[illegible] - EXTRACTION
P - PROPHYLAXIS
S - SEDATIVE TREATMENT

SR - SILVER RESTORATION
GR - GOLD RESTORATION
PR - PORCELAIN RESTORATION
OS - ORAL SURGERY
CB - CROWN OR BRIDGE SERVICE

DS - DENTURE SERVICE
GT - GINGIVAL TREATMENT
CA - CORRECTIVE APPLIANCE
RP - REPARATIVE PROCEDURE
PA - PREPARATORY APPOINTMENT

ASSIGNMENT SHEET #2



John Cavity, D.D.S., INC.
Jane Toothache, D.D.S., INC.
240 S. Western
Stillwater, Oklahoma 74074

372-1155

Wanda Mayfield
102 Miracle Rd.
Stillwater, Okla. 74074

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE		PAID		NEW BALANCE	
25794	1/18	Amalgam, Mod(4+) (cash.)	20	00	20	00	—	
	3/21	Denture repair	35	00			35.	00
	4/22	C. Inlay adj.	10	00			45.	00
25795	5/16	on account (ck)			45.	00	—	

1631

PAY LAST AMOUNT IN THIS COLUMN ⇧

O - OFFICE CALL
X - X-RAY
E - EXTRACTION
P - PROPHYLAXIS
S - SEDATIVE TREATMENT

SR - SILVER RESTORATION
GR - GOLD RESTORATION
PR - PORCELAIN RESTORATION
OS - ORAL SURGERY
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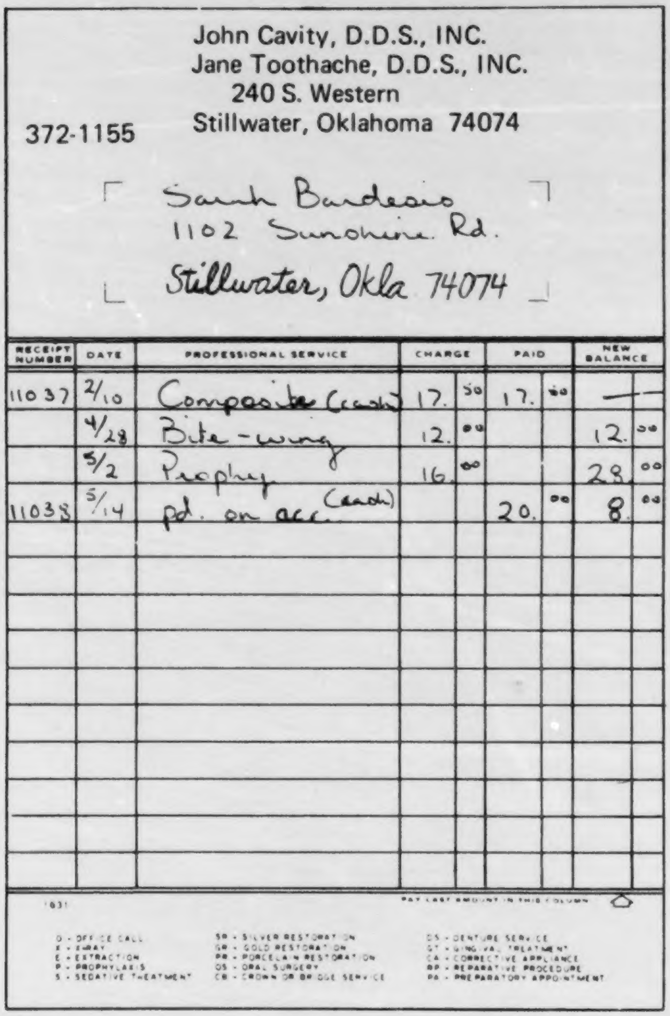
ASSIGNMENT SHEET #2



John Cavity, D.D.S., INC.
Jane Toothache, D.D.S., INC.
240 S. Western
372-1155 Stillwater, Oklahoma 74074

Sarah Bardesio
1102 Sunshine Rd.
Stillwater, Okla 74074

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE		PAID		NEW BALANCE	
11037	2/10	Composite (cash)	17.	50	17.	50	—	—
	4/28	Bite-wing	12.	00			12.	00
	5/2	Prophy	16.	00			28.	00
11038	5/14	pd. on acc. (cash)			20.	00	8.	00

1631

PAY LAST AMOUNT IN THIS COLUMN ⇧

O - OFFICE CALL
X - XRAY
E - EXTRACTION
P - PROPHYLAXIS
S - SEDATIVE TREATMENT

SR - SILVER RESTORATION
GR - GOLD RESTORATION
PR - PORCELAIN RESTORATION
OS - ORAL SURGERY
CB - CROWN OR BRIDGE SERVICE

DS - DENTURE SERVICE
GT - GINGIVAL TREATMENT
CA - CORRECTIVE APPLIANCE
RP - REPARATIVE PROCEDURE
PA - PREPARATORY APPOINTMENT

ASSIGNMENT SHEET #2

RECEIPTS

Telephone 372-1155 25796

John Cavity, D.D.S., Inc.
Jane Toothache, D.D.S., Inc.
240 S. Western
Stillwater, Oklahoma 74074

DATE ____________________

RECEIVED OF ____ $ ________

Check
Currency ____ DOLLARS

On Account of ____

Account Total $ ____________________

Amount Paid $ ____________________ Per ____________________

Balance Due $ ____________________

Kindly retain this receipt for tax purposes.

Telephone 372-1155 25797

John Cavity, D.D.S., Inc.
Jane Toothache, D.D.S., Inc.
240 S. Western
Stillwater, Oklahoma 74074

DATE ____________________

RECEIVED OF ____ $ ________

Check
Currency ____ DOLLARS

On Account of ____

Account Total $ ____________________

Amount Paid $ ____________________ Per ____________________

Balance Due $ ____________________

Kindly retain this receipt for tax purposes.

ASSIGNMENT SHEET #2

Telephone 372-1155 25798

John Cavity, D.D.S., Inc.
Jane Toothache, D.D.S., Inc.
240 S. Western
Stillwater, Oklahoma 74074

DATE ______________________

RECEIVED OF ____ $ __________
Check
Currency ____ DOLLARS

On Account of ____

Account Total $ ____________________

Amount Paid $ ____________________ Per ____________________

Balance Due $ ____________________

Kindly retain this receipt for tax purposes.

ASSIGNMENT SHEET #2

DAILY LOG/JOURNAL PAGE

NAME			SERVICE RENDERED	✓	CHARGE	PAID
8	00					
	15					
	30					
	45					
9	00					
	15					
	30					
	45					
10	00					
	15					
	30					
	45					
11	00					
	15					
	30					
	45					
12	00					
	15					
	30					
	45					
1	00					
	15					
	30					
	45					
2	00					
	15					
	30					
	45					
3	00					
	15					
	30					
	45					
4	00					
	15					
	30					
	45					
5	00					
	15					
	30					
	45					
6	00					
	15					
	30					
	45					
7	00					
	15					
	30					
	45					
8	00					
	15					

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DENTAL ACCOUNTING
UNIT II

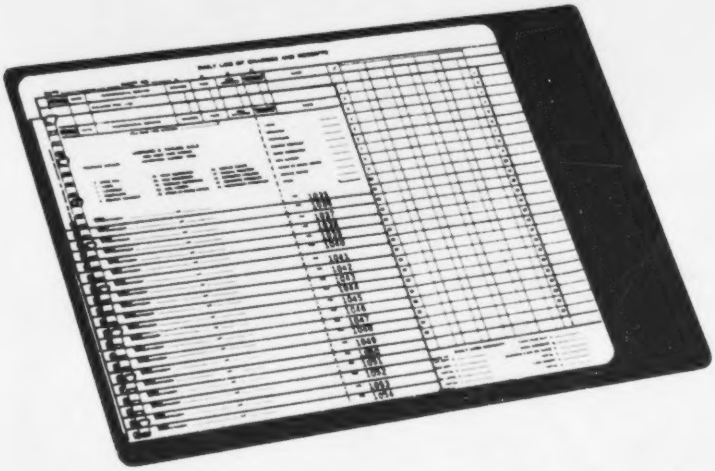
ASSIGNMENT SHEET #3--PRACTICE PEGBOARD SYSTEM

NAME______________________________ SCORE__________

When using the pegboard system, entries should be made with ballpoint pen; press hard so all information will transfer. The pegboard system is basically the same as other systems except you only write it once.

Place a new daily journal page on the pegboard each morning. Write in the date, number, and totals brought forward from previous page.

(NOTE: More than one page may be used per day but do not put more than one journal page on the pegboard at one time, as it makes the base too soft for carbons to come through.)



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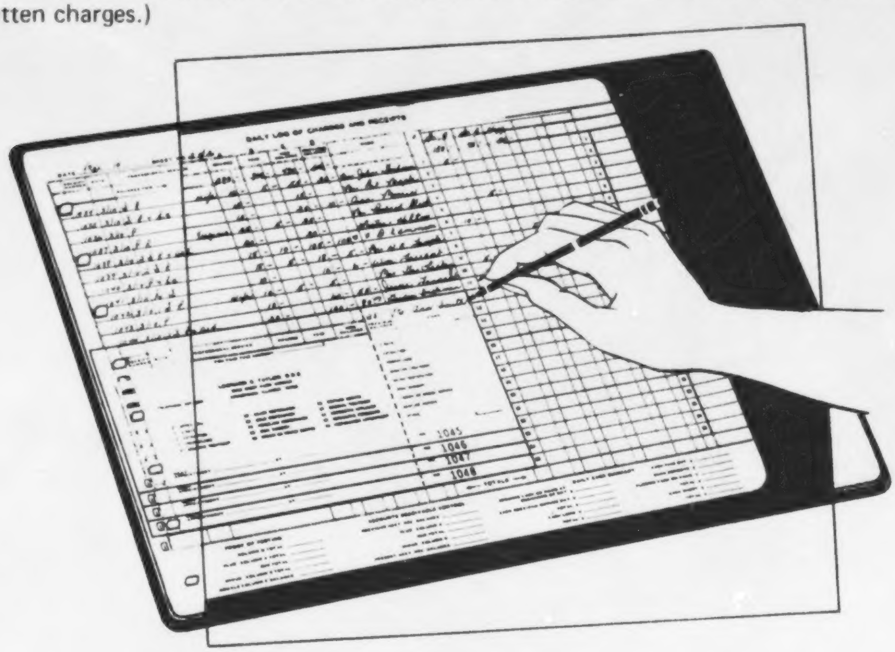
Place a series of receipts and charge slips in pegged position over journal page. Align first slip with first blank line.

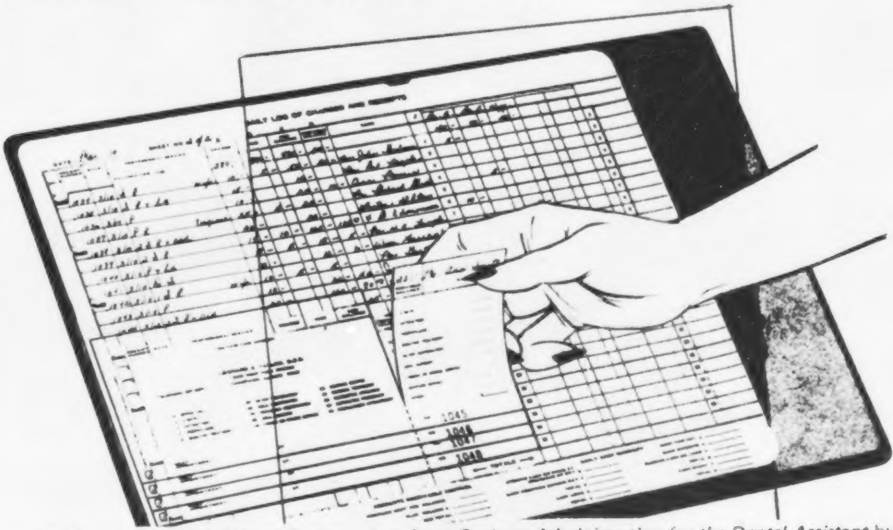
ASSIGNMENT SHEET #3

Complete charge slip portion and charge form when patient arrives.

(NOTE: This shows name of patient and previous balance. In doing this you have registered the person's name on the daily journal record; this insures that there will be no lost or forgotten charges.)


DAILY LOG OF CHARGES AND RECEIPTS
1045
1046
1047
1048

Tear off charge portion and attach to patient's chart, then forward to doctor.


DAILY LOG OF CHARGES AND RECEIPTS
1045
1046
1047
1048

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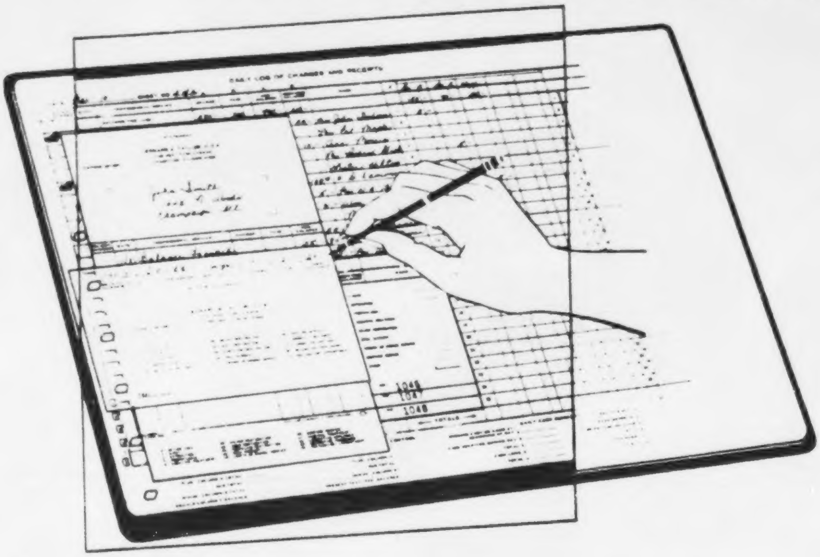
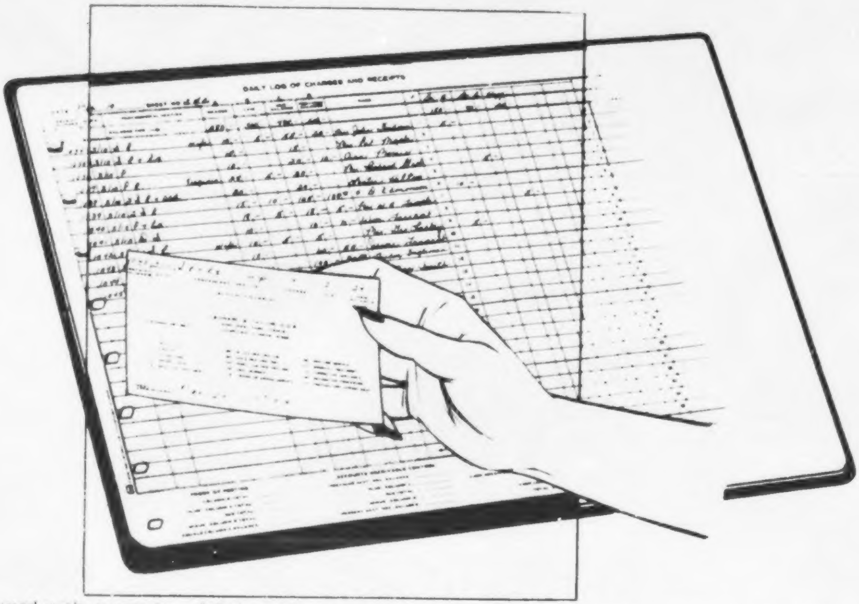
ASSIGNMENT SHEET #3

Place ledger card in proper alignment with first blank line under the correct prenumbered receipt form when the patient or assistant returns it to the business office.

Record the following entries starting from the left side: Receipt number, date, name of patient, services rendered, fees charged, payment made, and new balance, if any.



Remove receipt portion from pegboard and give to patient.



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DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #4--BALANCE DAILY LOG IN PEGBOARD SYSTEM

NAME____ SCORE____________

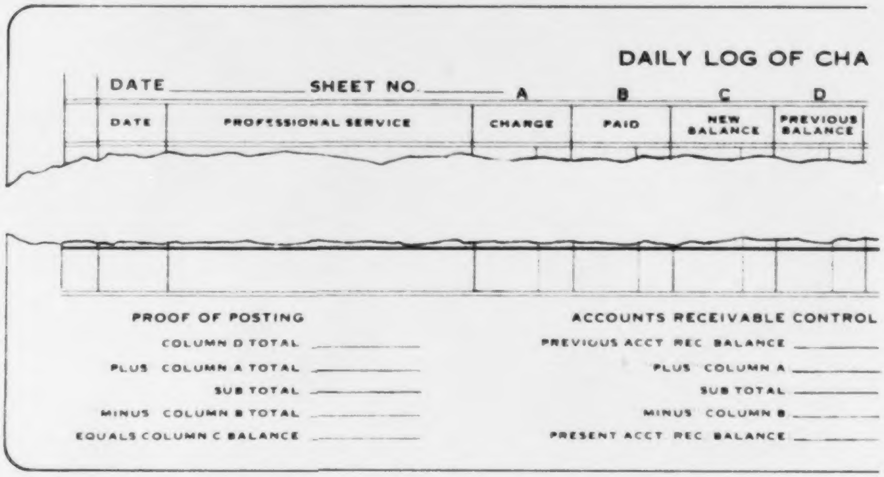
At the end of the day all columns of the daily journal page or pages are totaled.

If there is an error, it is necessary to go back and locate it. One place to look for errors is in the calculation of the new balances of accounts. This is done by adding the old balance (column D), to the charges (column A) and subtracting any payments (column B). This should equal the new balance shown in column C. If an error has been made, it must be corrected both on the daily journal page and on the patient's ledger card.

Provision for another routine is found at the bottom of the daily journal page. It is called "Accounts Receivable Control." The key word is "control." The total amount owed the practice by all patients is known as "accounts receivable." It changes every day, increased by the fees charged, decreased by payments received. For this calculation, the previous accounts receivable balance is brought forward. The total of column A is added to it. The column B total is subtracted from the resulting subtotal and thus yields the new balance of all accounts receivable. If the total continues to grow, there may be collection problems coming up.

Use the figures provided to balance the daily log below.

Column D total - $585.00
Column A total - $345.00
Column B total - $240.00



DAILY LOG OF CHA

DATE ____________ SHEET NO. ________

		A	B	C	D
DATE	PROFESSIONAL SERVICE	CHARGE	PAID	NEW BALANCE	PREVIOUS BALANCE

PROOF OF POSTING

COLUMN D TOTAL ____________
PLUS COLUMN A TOTAL ____________
SUB TOTAL ____________
MINUS COLUMN B TOTAL ____________
EQUALS COLUMN C BALANCE ____________

ACCOUNTS RECEIVABLE CONTROL

PREVIOUS ACCT REC BALANCE ____________
PLUS COLUMN A ____________
SUB TOTAL ____________
MINUS COLUMN B ____________
PRESENT ACCT REC BALANCE ____________

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DA - 129-H

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #5--FIGURE COURTESY DISCOUNTS

NAME____ SCORE____________

The health field is made up of a unique group of people who work as a team to give total care to humanity. As a general rule, when health professionals give care and treatment to their peers, it is customary to give a courtesy discount. This is usually in the form of a certain percentage of the usual fee subtracted from the total.

In figuring a patient's discount, drop the (%) and move the decimal point two places to the left. Multiply by that number to get the amount of discount.

Examples: 10% of $368.60

$368.60	$368.60
x .10	- 36.80
36.8600	$331.80

Figure discounts for the following:

Bill of $520.00 Doctor gave 20% professional discount
Bill of $600.00 Doctor gave 12% professional discount
Bill of $1,000.00 Doctor gave 15% professional discount

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #6--PREPARE A BANK DEPOSIT

NAME____ SCORE_____________

As a business office assistant you will be asked to deposit the money in the bank each day. Always be sure your bank deposit slips are completely and accurately made out.

The information needed to properly fill out the deposit slip includes: name of depositor, account number, date, and items to be deposited.

(NOTE: List checks by patient's name, to be used later as a double check in case of a mistake in the transfer of figures or money.)

Arrange bills in different denominations. You should separate each denomination in amounts of $20, $10, $5, and $1. Be sure all bills face the same way, with the picture side up and the large bills on top.

(NOTE: This makes money easier to count and the bank teller happy.)

Add all cash and fill in deposit slip where it says *currency* or *coin*.

List each check separately on the deposit slip. Add up cash and checks, and fill in where it says *Total*.

Prepare the following deposits using the forms on the next pages.

Deposit #1

Prepare a deposit for Margaret Reynolds, D.D.S., 80 Next Door Street, Fun City, America. zip. Account #36-444-1

CHECKS		CURRENCY	
Brown, Bill ck.	$ 50.00	5	$20.00 bills
Jones, Joe ck.	$100.00	8	$10.00 bills
Bardesis, Sara ck.	$ 14.00	3	$ 5.00 bills
Mayfield, Wanda ck.	$ 35.00	2	$ 1.00 bills

Deposit #2

Prepare a deposit slip for yourself. Your account number is 77-150-1

CHECKS		CURRENCY	
Raines, Janet ck.	$25.00	1	$20.00 bills
Murnane, Lynne ck.	$55.00	3	$10.00 bills
Hefner, Jack D. ck.	$ 4.78	6	$ 1.00 bills
Hefner, Jacke B. ck.	$67.52		

ASSIGNMENT SHEET #6

Deposit #1

CHECKING ACCOUNT DEPOSIT TICKET

NAME ______________________

____

DATE ______________ 19 ____

____

CASH	CURRENCY		
	COIN		
LIST CHECKS SINGLY			
TOTAL FROM OTHER SIDE			
TOTAL			
LESS CASH RECEIVED			
NET DEPOSIT			

[redacted]

86-00
1090

USE OTHER SIDE FOR ADDITIONAL LISTING

BE SURE EACH ITEM IS PROPERLY ENDORSED

Margaret Reynolds, D.D.S.
80 Next Door St.
Fun City, America 84620

Account Number

CHECKS AND OTHER ITEMS ARE RECEIVED FOR DEPOSIT SUBJECT TO THE PROVISIONS OF THE UNIFORM COMMERCIAL CODE OR ANY APPLICABLE COLLECTION AGREEMENT

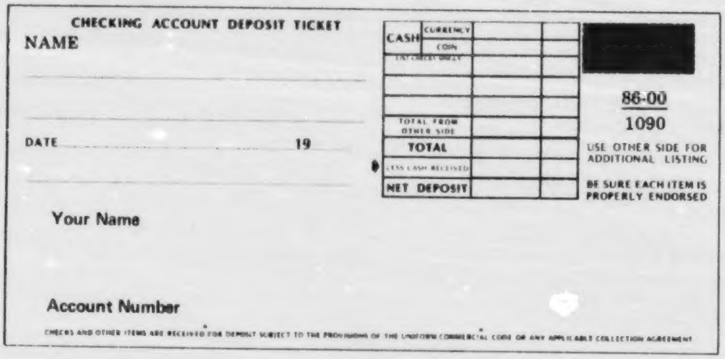
Back

CHECKS LIST SINGLY	DOLLARS	CENTS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
TOTAL		

ENTER TOTAL ON THE FRONT OF THIS TICKET

ASSIGNMENT SHEET #6

Deposit #2



CHECKING ACCOUNT DEPOSIT TICKET

NAME

DATE 19

CASH	CURRENCY		
	COIN		
LIST CHECKS SINGLY			
TOTAL FROM OTHER SIDE			
TOTAL			
LESS CASH RECEIVED			
NET DEPOSIT			

[redacted]

86-00
1090

USE OTHER SIDE FOR ADDITIONAL LISTING

BE SURE EACH ITEM IS PROPERLY ENDORSED

Your Name

Account Number

CHECKS AND OTHER ITEMS ARE RECEIVED FOR DEPOSIT SUBJECT TO THE PROVISIONS OF THE UNIFORM COMMERCIAL CODE OR ANY APPLICABLE COLLECTION AGREEMENT

Back

CHECKS LIST SINGLY	DOLLARS	CENTS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
TOTAL		

ENTER TOTAL ON THE FRONT OF THIS TICKET

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #7--PREPARE MONTHLY EXPENSE SHEET

NAME ______________________________ SCORE ____________

A monthly expense sheet is maintained for the doctor to determine the cost of conducting business and for income tax purposes. It is your job to prepare an accurate monthly expense sheet.

Use your judgment to determine where to enter the following expenditures. Use the expense sheet provided on the next page. Enter the amount of each check under "Amount paid" and then again under the appropriate column. When you are finished, add up each column. The total of the "Amount Paid" column should be the same as the other column totals added together.

Expenses for the month of January include:

Date	Check No.	Written to	For	Amount
1/2	Ch #1	Clinitex Supply Co.	Clinical Supplies	$144.15
1/2	Ch #2	Realty Investment Co.	Rent	$800.00
1/2	Ch #3	Ding-A-Ling Telephone Co.	Telephone	$150.00
1/4	Ch #4	Mary West	Assistant's Salary $75.00, S.S. $3.60, W.H. $12.70	$ 58.70
1/4	Ch #5	City of Fun City	Office Taxes	$ 9.06
1/4	Ch #6	Peter Hook	Repairs to Office	$ 30.00
1/4	Ch #7	Prudential Ins. Co.	Liability Ins.	$ 24.60
1/8	Ch #8	Public Service Electric & Gas Co.	(Office)	$ 65.00
1/9	Ch #9	National Dental Supply Co.	Supplies	$ 18.75
1/9	Ch #10	Mary West	Assistant's Salary $75.00, S.S. $3.60, W.H. $12.70	$ 58.70
1/16	Ch #11	Trades Hotel	Medical Meeting	$200.00
1/18	Ch #12	Pure Cleaning Services	Cleaning Office	$ 75.00

ASSIGNMENT SHEET #7

Date	Check No.	Written to	For	Amount
1/19	Ch #13	Cable Company	Office supplies	$ 18.50
1/19	Ch #14	S.S. White Dental Manufacturing Co.	Supplies	$ 85.00
1/23	Ch #15	American Dental Association	Dues	$125.00
1/24	Ch #16	Assoc. for the Blind	Donation	$ 25.00
1/24	Ch #17	Coffee Bean Company	Office Supplies	$100.00
1/25	Ch #18	Mary West	Assistant's Salary $75.00, S.S. $3.60, W.H. $12.70	$ 58.00
1/26	Ch #19	Sterile Drape Supply	Clinical Drapes	$ 25.00
1/27	Ch #20	Keystone Printing Co.	Office Stationery	$ 35.75
1/27	Ch #21	Hotel Traymore	Convention Expenses	$200.00
1/27	Ch #22	Cash	Personal	$ 75.00
1/27	Ch #23	Reale Towel Supply Co.	Laundry	$ 15.45
1/28	Ch #24	Reader's Digest	Office Magazine	$ 4.63
1/29	Ch #25	Dental Digest	Professional Magazine	$ 35.00
1/31	Ch #26	Warren Laboratory	Laboratory Fees	$175.00
1/31	Ch #27	Easy Repair Co.	Typewriter Repair	$ 75.00
1/31	Ch #28	Mary West	Assistant's Salary $75.00, S.S. $3.60, W.H. $12.70	$ 58.00

DA - 137-H

ASSIGNMENT SHEET #7

DISBURSEMENTS AND EXPENSE RECORD MONTH 19

AT END OF MONTH ADD COLUMNS AND ENTER TOTALS IN MONTHLY RECAPITULATION

	DATE	PAID TO	CHECK NO.	FOR	AMOUNT PAID	CLER-ICAL SUPPLIES	LABORA-TORY	OFFICE SUPPLIES	OFFICE PAYMENT UPKEEP	UTILITIES	LAUNDRY	SALARIES	MISC.						OTHER ITEMS	AMOUNT
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
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38																				
39																				
40																				
41																				
42																				
43																				
44																				
	TOTALS	(CARRY FORWARD IF MORE THAN ONE PAGE NEEDED)																		

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #8--PREPARE YEARLY SUMMARY SHEET

NAME____ SCORE____________________

The yearly summary sheet contains the total of each month's expenditures in each area paid. The totals are used at the end of the year to determine the amount paid out and the amount taken in.

Use totals entered in the January monthly expense sheet completed in Assignment Sheet #7 plus the totals given on the next page to complete the yearly summary sheet which follows. Add up each column for a yearly total when you are finished entering each month's figures.

ASSIGNMENT SHEET #8

MONTH	CLINICAL SUPPLIES	LABORATORY	OFFICE SUPPLIES	OFFICE PAY-MENT/UPKEEP	UTILITIES	LAUNDRY	SALARIES	MISC.
FEBRUARY	$620.00	$223.00	$430.00	$1,200.00	$225.00	$150.00	$525.00	$150.00
MARCH	444.00	200.00	180.00	990.00	236.00	75.00	525.00	400.00
APRIL	750.00	150.00	200.00	890.00	180.00	160.00	525.00	350.00
MAY	800.00	390.00	525.00	1,600.00	90.00	86.00	525.00	300.00
JUNE	500.00	290.00	300.00	1,700.00	96 00	200.00	565.00	250.75
JULY	320.00	330.00	150.00	950.00	125.85	400.00	525.00	340.00
AUGUST	85.00	223.00	730.00	1,300.00	240.00	57.00	525.00	60.00
SEPTEMBER	72.00	140.00	54.00	1,290.00	140.00	85.00	525.00	95.00
OCTOBER	920.00	340.75	75.00	1,329.00	65.00	64.00	525.00	45.00
NOVEMBER	500.00	140.00	45.00	1,400.00	100.00	50.00	525.00	89.00
DECEMBER	150.00	235.00	25.00	1,300.00	85.00	90.00	750.00	50.00

ASSIGNMENT SHEET #8

MONTH	CLINICAL SUPPLIES	LABORATORY	OFFICE SUPPLIES	OFFICE PAY-MENT/UPKEEP	UTILITIES	LAUNDRY	SALARIES	MISC.
JANUARY								
FEBRUARY								
MARCH								
APRIL								
MAY								
JUNE								
JULY								
AUGUST								
SEPTEMBER								
OCTOBER								
NOVEMBER								
DECEMBER								
TOTALS								

1332

1333

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #9--PREPARE RECORD OF EMPLOYEES' SALARIES AND TAX DEDUCTIONS

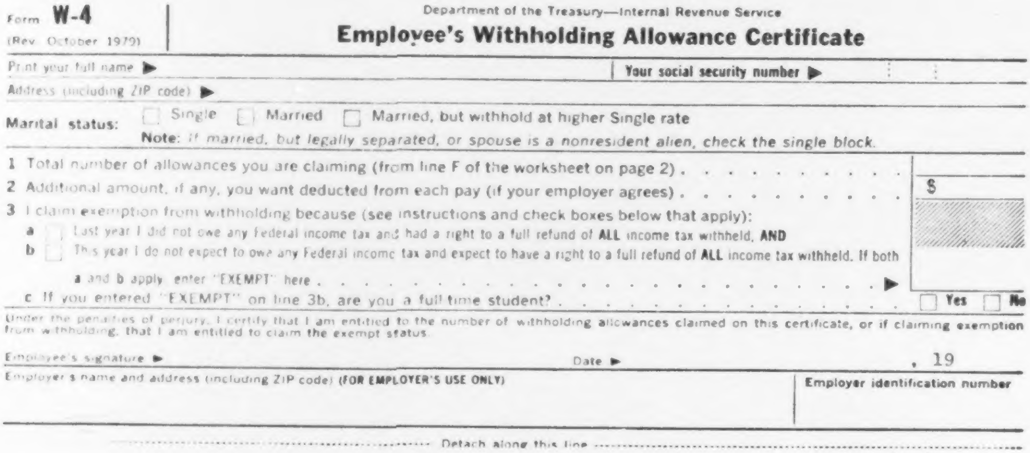
NAME ______________________ SCORE ____________

PART I

One of the forms a dental assistant must fill out upon getting a job is Employee's Withholding Allowance Certificate, Form W-4. The number of exemptions that you claim on this form will be used in computing your withholding tax.

(NOTE: You must have your Social Security number before going to work.)

Complete the W-4 form below using your full name, your Social Security number, home address, city, state, and zip code. Choose the exemptions that fit you, total exemptions at bottom, then sign your name and date the form.



Form **W-4**
(Rev. October 1979)

Department of the Treasury—Internal Revenue Service

Employee's Withholding Allowance Certificate

Print your full name ▶ **Your social security number ▶**

Address (including ZIP code) ▶

Marital status: ☐ Single ☐ Married ☐ Married, but withhold at higher Single rate
Note: *If married, but legally separated, or spouse is a nonresident alien, check the single block.*

1 Total number of allowances you are claiming (from line F of the worksheet on page 2) . . . .
2 Additional amount, if any, you want deducted from each pay (if your employer agrees) . . . . $
3 I claim exemption from withholding because (see instructions and check boxes below that apply):
a ☐ Last year I did not owe any Federal income tax and had a right to a full refund of **ALL** income tax withheld, **AND**
b ☐ This year I do not expect to owe any Federal income tax and expect to have a right to a full refund of **ALL** income tax withheld. If both a and b apply, enter "EXEMPT" here . . . . ▶
c If you entered "EXEMPT" on line 3b, are you a full time student? . . . . ☐ **Yes** ☐ **No**

Under the penalties of perjury, I certify that I am entitled to the number of withholding allowances claimed on this certificate, or if claiming exemption from withholding, that I am entitled to claim the exempt status.

Employee's signature ▶ Date ▶ , 19

Employer's name and address (including ZIP code) **(FOR EMPLOYER'S USE ONLY)** **Employer identification number**

Detach along this line

ASSIGNMENT SHEET #9

PART II

The tax rate is determined by Congress according to the Federal Insurance Contribution Act (FICA) It is very important that you learn to figure Social Security (FICA) tax, since every employer is required to deduct (FICA) taxes from salaries paid to employees. As a business assistant, you will have to figure Social Security taxes for other employees.

Check with your instructor for the current tax rate paid by each employee.

Shown below are sample instructions for figuring Social Security deductions:

The FICA withholding table, for employee's share of tax only, is extended to only $100 of wages. To compute the FICA withholding for wages over $100, either multiply the total wage by 6.13% or use the multiples of the tax on $100 wages. The multiples are listed at the end of the table.

Example 2.—Wage paid subject to FICA is $1,289.62. The amount of FICA tax to be withheld is:

on $1,000.00	$61.30
on 200.00	12.26
on 89.62	5.49
total	$79.05

Example 1.—Wage paid subject to FICA is $437.82. The amount of FICA tax to be withheld is:

on $400.00	$24.52
on 37.82	2.32
total	$26.84

Figure taxes on the following salaries by using tax tables provided by your instructor.

Mary Brown earns $225.00 a week. How much Social Security tax should be deducted each week?____________________________

David Jones earns $200.00 a week. How much Social Security tax should be deducted each week?____________________________

Janet Green earns $750.00 a month. How much Social Security tax should be deducted each week?____________________________

ASSIGNMENT SHEET #9

PART III

A yearly earnings record must be filled out for each employee. It shows total earnings, deductions, and net salary. For a class, you will only complete a record for six months (2 quarters).

At the top of the form on the next page you will find space for employee name, Social Security number, and number of exemptions. Your sample employee will be Mary Brown from Part II, whose salary is $225.00 per week. She is single, claims one exemption, and is paid weekly. She also received a raise after the first quarter of $10.00 per week.

Fill out the Earnings Record using the Social Security tables and the withholding tables provided by your instructor.

Be sure to fill in:

1. Date paid (Date of employee's check)
2. Period paid for (Weekly, monthly)
3. Earnings (Gross salary)
4. Income tax (Withholding tax)
5. Social Security tax (F.I.C.A.)
6. Net salary (salary after deductions)

(NOTE: Other deductions include State income tax, hospitalization insurance.)

ASSIGNMENT SHEET #9

EARNINGS RECORD – SOCIAL SECURITY – WITHHOLDING

NAME **SOCIAL SEC. NO.** **EXEMPTIONS**

DATE PAID	PERIOD PAID FOR			WITHHOLDING		O.A.B.		OTHER WITHHOLDING				NET PAID	
TOTAL JAN.													
TOTAL FEB													
TOTAL MAR.													
TOTAL 1st QTR.													
TOTAL APRIL													
TOTAL MAY													
TOTAL JUNE													
TOTAL 2nd QTR.													
TOTAL HALF YEAR													

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DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #10--WRITE A CHECK AND COMPLETE CHECK STUB

NAME ______________________________ SCORE ______________

Another duty of the business office assistant is writing checks to pay bills. You should develop a good, accurate method of writing checks.

Checks are always written in ink or typed, to prevent anyone from erasing or changing the amount written.

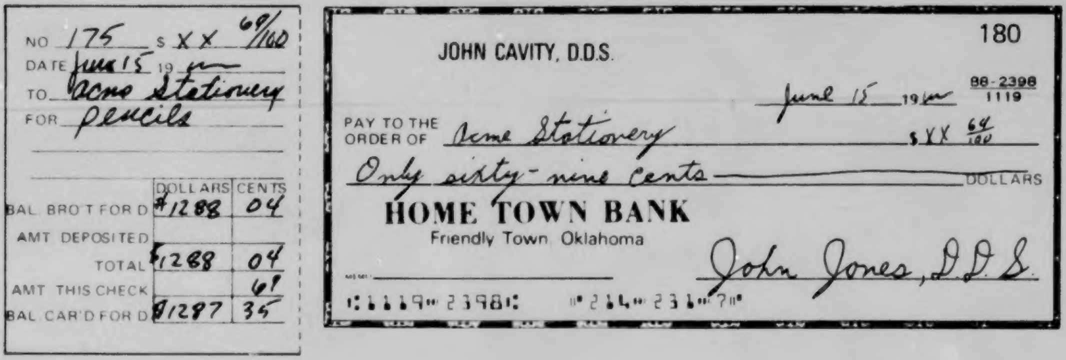
The date of the check must be the exact date it is written. Do not postdate a check. Do not erase. If an error is made, write "Void" on the check and stub.

Write the amount in large figures next to the printed dollar sign, close enough to prevent the insertion of other figures. In spelling out the amount, start at the extreme left, capitalize the first letter only, record cents as a fraction of one hundred.

Examples:	$225 00/100 Two hundred twenty five dollars and no/100	$1,225 75/100 One thousand two hundred twenty-five dollars and 75/100

If you write a check for less than a dollar, precede the spell-out amount with the word "only" and cross out the printed word "dollars."

Example:



NO 175 $ XX 69/100
DATE June 15 19 —
TO Acme Stationery
FOR pencils

	DOLLARS	CENTS
BAL. BRO'T FOR'D	$1288	04
AMT. DEPOSITED		
TOTAL	$1288	04
AMT. THIS CHECK		69
BAL. CAR'D FOR'D	$1287	35

180

JOHN CAVITY, D.D.S.

June 15 19—
88-2398
1119

PAY TO THE ORDER OF Acme Stationery $ XX 64/100

Only sixty-nine cents ——————— ~~DOLLARS~~

HOME TOWN BANK
Friendly Town, Oklahoma

John Jones, D.D.S.

⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

ASSIGNMENT SHEET #10

On the blank checks and stubs provided on the next pages, write checks for amounts and person designated. The checks will be signed by John Cavity, D.D.S., and the balance forward is $5,043.38. Number the checks and stubs beginning with the first of July. Write the stub amount first, then the check.

(NOTE: There will be a deposit to add.)

Balance - July 0, 1900

(NOTE: These are just a few of the monthly expenses in an office.)

Check #1 -	Telephone Company	$ 30.80
Check #2 -	Gas Company	$ 23.01
Check #3 -	Bright Light Electric Company	$ 43.80
Check #4 -	Sparkling Water Company	$ 12.82
Check #5 -	Friendly Cleaning Service (office)	$ 40.00
Check #6 -	National Dental Supply Company	$180.00
	Deposit	$550.00
Check #7 -	Big Letter Printing Company (office stationery)	$ 37.75
Check #8 -	Towel Supply Company	$ 35.00

ASSIGNMENT SHEET #10

NO ____________ $ ____________

DATE ____________ 19 ____________

TO ____________

FOR ____________

	DOLLARS	CENTS
BAL. BRO'T FOR D.		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR D.		

175

JOHN CAVITY, D.D.S.

88-2398
1119

____________ 19____

PAY TO THE
ORDER OF ____________ $____________

____________ DOLLARS

HOME TOWN BANK
Friendly Town, Oklahoma

MEMO ____________ ____________

⑆1119⑉2398⑆ ⑈214⑉231⑉7⑈

NO ____________ $ ____________

DATE ____________ 19 ____________

TO ____________

FOR ____________

	DOLLARS	CENTS
BAL. BRO'T FOR D.		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR D.		

176

JOHN CAVITY, D.D.S.

88-2398
1119

____________ 19____

PAY TO THE
ORDER OF ____________ $____________

____________ DOLLARS

HOME TOWN BANK
Friendly Town, Oklahoma

MEMO ____________ ____________

⑆1119⑉2398⑆ ⑈214⑉231⑉7⑈

ASSIGNMENT SHEET #10

NO. ________ $ ________
DATE ________ 19 ________
TO ________
FOR ________

	DOLLARS	CENTS
BAL. BRO'T FOR D.		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR D.		

180

JOHN CAVITY, D.D.S.

________ 19 ____ 86-2398 / 1119

PAY TO THE ORDER OF ________ $ ________

________ DOLLARS

HOME TOWN BANK
Friendly Town, Oklahoma

⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

NO. ________ $ ________
DATE ________ 19 ________
TO ________
FOR ________

	DOLLARS	CENTS
BAL. BRO'T FOR D.		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR D.		

181

JOHN CAVITY, D.D.S.

________ 19 ____ 86-2398 / 1119

PAY TO THE ORDER OF ________ $ ________

________ DOLLARS

HOME TOWN BANK
Friendly Town, Oklahoma

⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

ASSIGNMENT SHEET #10

NO. ______ $ ______
DATE ______ 19 ______
TO ______
FOR ______

	DOLLARS	CENTS
BAL. BRO'T FOR'D		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR'D		

182

JOHN CAVITY, D.D.S.

______ 19 ______ 88-2398/1119

PAY TO THE ORDER OF ______ $ ______

______ DOLLARS

HOME TOWN BANK
Friendly Town, Oklahoma

MEMO ______ ______

⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

NO. ______ $ ______
DATE ______ 19 ______
TO ______
FOR ______

	DOLLARS	CENTS
BAL. BRO'T FOR'D		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR'D		

183

JOHN CAVITY, D.D.S.

______ 19 ______ 88-2398/1119

PAY TO THE ORDER OF ______ $ ______

______ DOLLARS

HOME TOWN BANK
Friendly Town, Oklahoma

MEMO ______ ______

⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

ASSIGNMENT SHEET #10

NO ____________ $ ____________
DATE ____________ 19 ____________
TO ____________
FOR ____________

	DOLLARS	CENTS
BAL. BRO'T FOR'D		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR'D		

178

JOHN CAVITY D.D.S.

____________ 19____ 88-2398/1119

PAY TO THE ORDER OF ____________ $ ____________

____________ DOLLARS

HOME TOWN BANK
Friendly Town, Oklahoma

⑆1119⑉2398⑆ ⑈214⑉231⑉7⑈

NO ____________ $ ____________
DATE ____________ 19 ____________
TO ____________
FOR ____________

	DOLLARS	CENTS
BAL. BRO'T FOR'D		
AMT. DEPOSITED		
TOTAL		
AMT. THIS CHECK		
BAL. CAR'D FOR'D		

179

JOHN CAVITY D.D.S.

____________ 19____ 88-2398/1119

PAY TO THE ORDER OF ____________ $ ____________

____________ DOLLARS

HOME TOWN BANK
Friendly Town Oklahoma

⑆1119⑉2398⑆ ⑈214⑉231⑉7⑈

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #11--RECONCILE BANK STATEMENT

NAME ______________________ SCORE ____________

In order to maintain an accurate record of the office's checking account, the bank statement should be reconciled as soon as the records are received from the bank. Use the checks listed below and the bank statement provided to fill out the bank reconciliation form which follows. In the office you will have the real checks to use.

Account of Jane E. Doe, D.D.S.

Balance, January 1, 1980: $2,043.38

Expenses for the month include:

Date	Check No.	Written to	For	Amount
1/2	Ch #1	Automatic Supplies	Clinical Supplies	$144.15
1/2	Ch #2	Realty Investment Co.	Rent	$200.00
1/2	Ch #3	Ding-A-Ling Telephone Co.	Telephone	$ 6.08
1/4	Ch #4	Mary West	Assistant's Salary $75.00, S.S. $3.60, W.H. $12.70	$ 58.70
1/4	Ch #5	City of Mericle	Office Taxes	$ 9.06
1/4	Ch #6	Peter Hook	Repairs to Office	$ 30.00
1/4	Ch #7	Prudential Ins. Co.	Liability Ins.	$ 24.60
1/8	Ch #8	Public Service Electric & Gas Co.	(Office)	$ 14.01
1/9	Ch #9	National Dental Supply Co.	Supplies	$ 18.75
1/9	Ch #10	Mary West	Assistant's Salary $75.00, S.S. $3.60, W.H. $12.70	$ 58.70
1/16	Ch #11	Cash	Personal	$100.00
1/18	Ch #12	Pure Cleaning Services	Cleaning Office	$ 30.00
1/19	Ch #13	L.D. Dental Co.	Supplies	$ 18.50
1/19	Ch #14	S.S. White Dental Manufacturing Co.	Supplies	$ 26.25
	Deposit			$350.00

ASSIGNMENT SHEET #11

Date	Check No.	Written to	For	Amount
1/23	Ch #15	American Dental Assoc.	Dues	$125.00
1/24	Ch #16	Assoc. for the Blind	Gift	$ 25.00
1/24	Ch #17	Cash	Personal	$100.00
1/25	Ch #18	Mary West	Assistant's Salary $75.00, S.S. $3.60, W.H. $12.70	$ 58.70
1/26	Ch #19	Cash	Petty Cash	$ 25.00
1/27	Ch #20	Keystone Printing Co.	Office Stationery	$ 35.75
1/27	Ch #21	Hotel Traymore	Convention Expenses	$ 65.35
1/27	Ch #22	Cash	Personal	$ 75.00
	Deposit			$300.00
1/27	Ch #23	Reale Towel Supply Co.	Laundry	$ 15.45
1/28	Ch #24	Reader's Digest	Office Magazine	$ 4.63
1/29	Ch #25	Dental Digest	Professional Magazine	$ 6.00
1/31	Ch #26	Warren Laboratory	Laboratory Fees	$175.00
	Deposit			$425.00
1/31	Ch #27	Cash	Personal	$ 75.00
1/31	Ch #28	Mary West	Assistant's Salary $75.00, S.S. $3.60, W.H. $12.70	$ 58.70
1/31	Deposit			$500.00

ASSIGNMENT SHEET #11

BANK STATEMENT

THE 5th NATIONAL BANK
Spirits, America Zip

Dr. Jane E. Doe
300 North 13th Street
Spirits, America Zip
101-491-9 E

CHECKS	CHECKS	DEPOSITS	NO. OF CHECKS	DATE	BALANCE
		BALANCE FORWARD		12-30	2,043.38
144.15	200.00			1-2	1,699.23
				1-2	
6.08				1-2	
58.70					
9.06				1-2	1,625.39
24.60				1-4	1,600.79
14.01				1-4	
58.70					
30.00				1-3	1,498.08
18.50	26.25			1-12	1,453.33
		350.00		1-13	1,803.33
25.00	35.75			1-15	
100.00	65.35				
58.70	75.00				
25.00				1-19	1,418.53
		300.00		1-19	1,718.53
15.45					
6.00					
175.00				1-21	1,522.08
		425.00		1-21	1,947.08
75.00	58.70			1-26	1,813.38
	2.97 SC				1,810.41

PLEASE EXAMINE STATEMENT OF ACCOUNT AND VOUCHERS AT ONCE

IF NO ERROR IS REPORTED IN TEN DAYS THE ACCOUNT WILL BE CONSIDERED CORRECT

KEY

SC — Service Charges
EC — Error Corrected
RT — Returned Item
CC — Certified Check
DM — Debit Memo
CM — Credit Memo
OD — Overdraft
NC — No Count
LS — Total of Several Items

↑ Last Amount In This Column Is Your Balance

KINDLY NOTIFY THIS BANK IMMEDIATELY OF CHANGE OF ADDRESS

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156-H

ASSIGNMENT SHEET #11

JANE DOE, D.D.S.
BANK RECONCILIATION
JANUARY 31, 1980

Balance per Bank Statement $ ____________

+Deposit of 1-31-80 not on statement $ 500.00

$ ____________

Less Outstanding Checks

No. - $ ________

No. - $ ________

No. - $ ________

No. - $ ________

No. - $ ________

No. - $ ________

No. - $ ________

Total Outstanding Checks $ ____________

Adjusted Bank Balance $ ____________

Balance per Checkbook $ ____________

Subtract

Debit Memo $ ________

Service Charges $ ________

Adjusted Checkbook Balance $ ____________

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #12--COMPLETE PETTY CASH SUMMARY

NAME____________________________________ SCORE____________

PART I

Petty cash is used to pay for small office expenses such as stamps, deliveries, flowers.

As a business office assistant, you will be responsible for preparing vouchers for all petty cash disbursements, and for depositing $50.00 into the fund each month. During the month of August the following transactions occurred.

Complete a voucher for each transaction listed below using the forms on the next pages. Use your name on the approved by line.

(NOTE: Remember you have $50.00 in your fund.)

August 6	Gave Marvell Pippin $10.00 for postage stamps (office expense)
August 8	Gave Susan Hedrick $5.00 to buy coffee (miscellaneous)
August 10	Gave $12.00 to Kenneth Helt for repairing lock on door (miscellaneous)
August 13	Gave $3.00 to Jean Grant for emergency supplies (miscellaneous)
August 19	Gave $2.50 to Bonnie Glover for carbon paper (office expense)
August 21	Gave $3.00 to Sara Swartz for an extension cord (office expense)
August 22	Gave $3.50 to Gerry Hall for pencils (office expense)
August 28	Made $10.00 donation to Boy Scouts (miscellaneous)
August 29	Balance $1.00

ASSIGNMENT SHEET #12

No.__________ Amount $__________

PETTY CASH VOUCHER

Date__________

Paid to __________

For __________

Charge to __________

Approved by __________

Receivedby __________

No.__________ Amount $__________

PETTY CASH VOUCHER

Date__________

Paid to__________

For __________

Charge to__________

Approved by __________

Received by __________

No __________ Amount $__________

PETTY CASH VOUCHER

Date__________

Paid to __________

For __________

Charge to __________

Approved by __________

Receivedby __________

No__________ Amount $ __________

PETTY CASH VOUCHER

Date __________

Paid to __________

For __________

Charge to __________

Approved by __________

Received by __________

ASSIGNMENT SHEET #12

No.______ Amount $________

PETTY CASH VOUCHER

Date____________

Paid to____________________

For____________________

Charge to____________________

Approved by____________________

Received by____________________

No.______ Amount $________

PETTY CASH VOUCHER

Date____________

Paid to____________________

For____________________

Charge to____________________

Approved by____________________

Received by____________________

No.______ Amount $________

PETTY CASH VOUCHER

Date____________

Paid to____________________

For____________________

Charge to____________________

Approved by____________________

Received by____________________

No.______ Amount $________

PETTY CASH VOUCHER

Date____________

Paid to____________________

For____________________

Charge to____________________

Approved by____________________

Received by____________________

ASSIGNMENT SHEET #12

PART II

Use the space provided below to prepare a petty cash summary listing the totals of cash payments for each classification and the amount on hand, if any.

(NOTE: Use vouchers #1-#8.)

Example: Office expense $19.00

ASSIGNMENT SHEET #12

PART III

Fill in petty cash book and replenish account with a check for $50.00.

PETTY CASH FUND		DATE	EXPLANATION	VOUCHER NO.	DISTRIBUTION OF PAYMENTS			
RECEIVED	PAID OUT				OFFICE EXPENSE		MISC. EXPENSES	

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DA - 163-H

DENTAL ACCOUNTING
UNIT II

ASSIGNMENT SHEET #13--COMPLETE INSURANCE FORM

NAME____ SCORE____________

The business office assistant will be responsible for completing the insurance forms in the dental office. There are many kinds of forms but they all have the same goal, to assist in the payment of dental treatment.

Use your own name, information about yourself and your doctor to complete the form on the next page down to question number 14. Then use the information provided below. Some offices will use a procedure number; other offices will list treatment statements, or both.

Use both methods for this assignment to acquaint yourself with using treatment statements and numbers. Obtain current charges for each of the dental services provided and list in Column E.

Date	Tooth number	Treatment	Procedure number
8-14		Complete series of X-rays	00210
8-14		Initial oral examination	00110
9-18	19	Three-surface amalgam on permanent tooth	02160
10-2	27	Porcelain fused to precious metal crown	06750
11-3	28	Porcelain fused to metal pontic	06240
11-5	29	Porcelain fused to precious metal crown	06750
11-28	9	One canal root canal	03310
12-2	9	Porcelain fused to precious metal crown	02750
12-2	16	Soft tissue impaction	07720

HEALTH INSURANCE CLAIM FORM

DA - 165-H

READ INSTRUCTIONS BEFORE COMPLETING OR SIGNING THIS FORM

TYPE OR PRINT ☐ MEDICARE ☐ MEDICAID ☐ CHAMPUS ☐ OTHER

PATIENT & INSURED (SUBSCRIBER) INFORMATION

1 PATIENT'S NAME *(First name, middle initial, last name)*

2 PATIENT'S DATE OF BIRTH

3 INSURED'S NAME *(First name, middle initial, last name)*

4 PATIENT'S ADDRESS *(Street, city, state, ZIP code)*

5 PATIENT'S SEX MALE ☐ ☐ FEMALE

6 INSURED'S I.D. No. or **MEDICARE No.** *(Include any letters)*

7 PATIENT'S RELATIONSHIP TO INSURED SELF ☐ SPOUSE ☐ CHILD ☐ OTHER ☐

8 INSURED'S GROUP NO. *(Or Group Name)*

9 OTHER HEALTH INSURANCE COVERAGE - Enter Name of Policyholder and Plan Name and Address and Policy or Medical Assistance Number

10 WAS CONDITION RELATED TO:

A. PATIENT'S EMPLOYMENT YES ☐ ☐ NO

B. AN AUTO ACCIDENT YES ☐ ☐ NO

11 INSURED'S ADDRESS *(Street, city, state, ZIP code)*

12 PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE *(Read back before signing)*

I Authorize the Release of any Medical Information Necessary to Process this Claim and Request Payment of MEDICARE/CHAMPUS Benefits Either to Myself or to the Party Who Accepts Assignment Below

SIGNED *DATE*

13 *I AUTHORIZE PAYMENT OF MEDICAL BENEFITS TO UNDERSIGNED PHYSICIAN OR SUPPLIER FOR SERVICE DESCRIBED BELOW*

SIGNED (Insured or Authorized Person)

PHYSICIAN OR SUPPLIER INFORMATION

14 DATE OF ◀ ILLNESS (FIRST SYMPTOM) OR INJURY (ACCIDENT) OR PREGNANCY (LMP)

15 DATE FIRST CONSULTED YOU FOR THIS CONDITION

16 HAS PATIENT EVER HAD SAME OR SIMILAR SYMPTOMS? YES ☐ ☐ NO

17 DATE PATIENT ABLE TO RETURN TO WORK

18 DATES OF TOTAL DISABILITY FROM THROUGH

DATES OF PARTIAL DISABILITY FROM THROUGH

19 NAME OF REFERRING PHYSICIAN

20 FOR SERVICES RELATED TO HOSPITALIZATION GIVE HOSPITALIZATION DATES ADMITTED DISCHARGED

21 NAME & ADDRESS OF FACILITY WHERE SERVICES RENDERED *(If other than home or office)*

22 WAS LABORATORY WORK PERFORMED OUTSIDE YOUR OFFICE? YES ☐ ☐ NO CHARGES

23 DIAGNOSIS OR NATURE OF ILLNESS OR INJURY. RELATE DIAGNOSIS TO PROCEDURE IN COLUMN D BY REFERENCE TO NUMBERS 1, 2, 3, ETC. OR DX CODE ▼

1

2

3

4

24 A DATE OF SERVICE	B • PLACE OF SERVICE	C FULLY DESCRIBE PROCEDURES, MEDICAL SERVICES OR SUPPLIES FURNISHED FOR EACH DATE GIVEN PROCEDURE CODE (IDENTIFY:)	*(EXPLAIN UNUSUAL SERVICES OR CIRCUMSTANCES)*	D DIAGNOSIS CODE	E CHARGES	F

25 SIGNATURE OF PHYSICIAN OR SUPPLIER *(Read back before signing)*

SIGNED DATE

26 ACCEPT ASSIGNMENT (GOVERNMENT CLAIMS ONLY) (SEE BACK) YES ☐ ☐ NO

27 TOTAL CHARGE

28 AMOUNT PAID

29 BALANCE DUE

30 YOUR SOCIAL SECURITY NO.

31 PHYSICIAN'S OR SUPPLIER'S NAME, ADDRESS, ZIP CODE & TELEPHONE NO.

I.D. NO.

32 YOUR PATIENT'S ACCOUNT NO.

33 YOUR EMPLOYER I.D. NO.

• PLACE OF SERVICE CODES

1 — (IH) — INPATIENT HOSPITAL	4 — (H) — PATIENT'S HOME	7 — (NH) — NURSING HOME	O — (OL) — OTHER LOCATIONS
2 — (OH) — OUTPATIENT HOSPITAL	5 — DAY CARE FACILITY (PSY)	8 — (SNF) — SKILLED NURSING FACILITY	A — (IL) — INDEPENDENT LABORATORY
3 — (O) — DOCTOR'S OFFICE	6 — NIGHT CARE FACILITY (PSY)	9 — AMBULANCE	B — OTHER MEDICAL/SURGICAL FACILITY

APPROVED BY AMA COUNCIL ON MEDICAL SERVICE 5-74

DENTAL ACCOUNTING
UNIT II

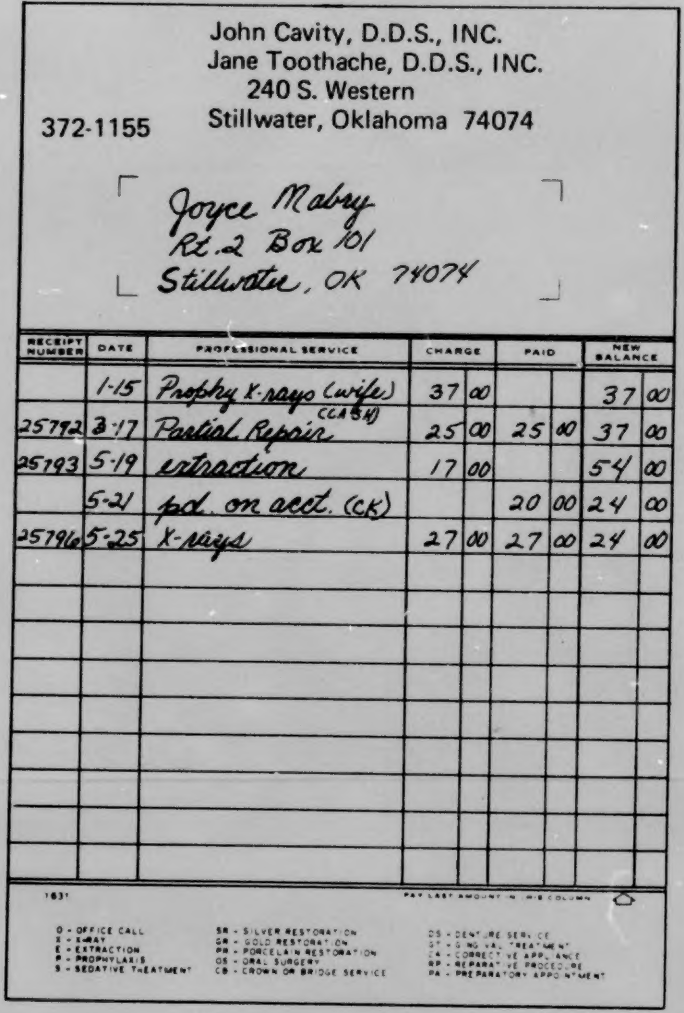
ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

Evaluated to satisfaction of instructor

Assignment Sheet #2

LEDGER CARDS



John Cavity, D.D.S., INC.
Jane Toothache, D.D.S., INC.
240 S. Western
Stillwater, Oklahoma 74074

372-1155

Joyce Mabry
Rt. 2 Box 101
Stillwater, OK 74074

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE		PAID		NEW BALANCE	
	1-15	Prophy X-rays (wife)	37	00			37	00
25792	3-17	Partial Repair (CASH)	25	00	25	00	37	00
25793	5-19	extraction	17	00			54	00
	5-21	pd. on acct. (CK)			20	00	24	00
25796	5-25	X-rays	27	00	27	00	24	00

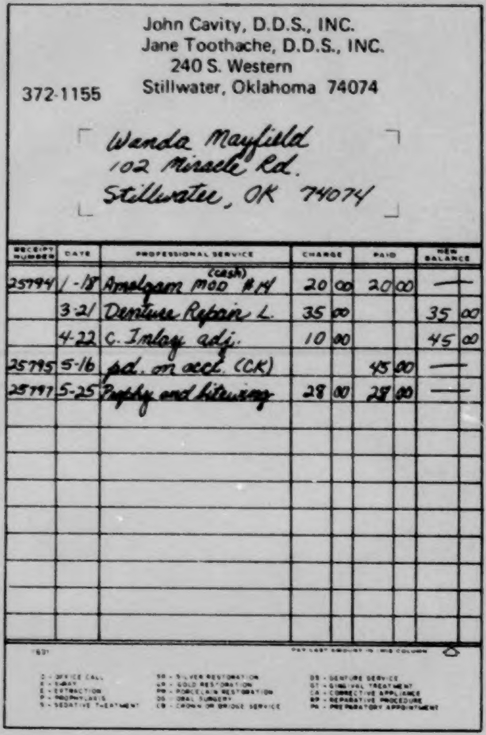
1631

PAY LAST AMOUNT IN THIS COLUMN ⇧

O - OFFICE CALL
X - X-RAY
E - EXTRACTION
P - PROPHYLAXIS
S - SEDATIVE TREATMENT

SR - SILVER RESTORATION
GR - GOLD RESTORATION
PR - PORCELAIN RESTORATION
OS - ORAL SURGERY
CB - CROWN OR BRIDGE SERVICE

DS - DENTURE SERVICE
GT - GINGIVAL TREATMENT
CA - CORRECTIVE APPLIANCE
RP - REPARATIVE PROCEDURE
PA - PREPARATORY APPOINTMENT



John Cavity, D.D.S., INC.
Jane Toothache, D.D.S., INC.
240 S. Western
372-1155 Stillwater, Oklahoma 74074

Wanda Mayfield
102 Miracle Rd.
Stillwater, OK 74074

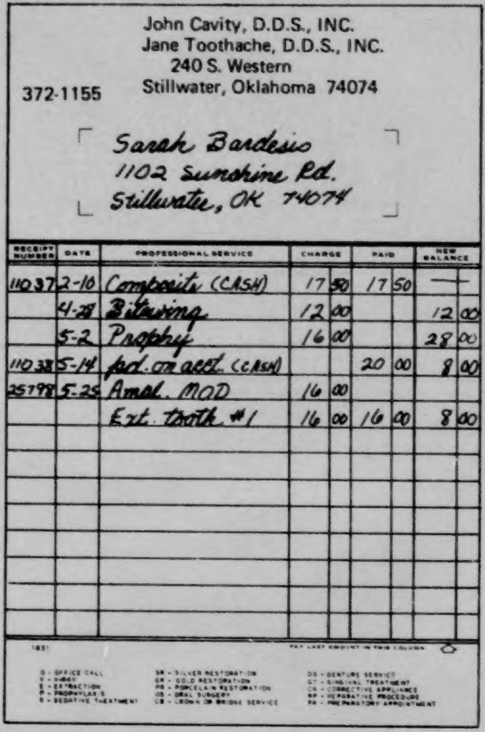
RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE	PAID	NEW BALANCE
25794	1-18	Amalgam MOD (cash) #14	20 00	20 00	—
	3-21	Denture Repair L.	35 00		35 00
	4-22	c. Inlay adj.	10 00		45 00
25795	5-16	pd. on acct. (CK)		45 00	—
25797	5-25	Prophy and bitewing	28 00	28 00	—

PAY LAST AMOUNT IN THIS COLUMN

O - OFFICE CALL
X - X-RAY
E - EXTRACTION
P - PROPHYLAXIS
S - SEDATIVE TREATMENT

SR - SILVER RESTORATION
GR - GOLD RESTORATION
PR - PORCELAIN RESTORATION
OS - ORAL SURGERY
CB - CROWN OR BRIDGE SERVICE

DS - DENTURE SERVICE
GT - GINGIVAL TREATMENT
CA - CORRECTIVE APPLIANCE
RP - REPARATIVE PROCEDURE
PA - PREPARATORY APPOINTMENT



John Cavity, D.D.S., INC.
Jane Toothache, D.D.S., INC.
240 S. Western
372-1155 Stillwater, Oklahoma 74074

Sarah Bardesio
1102 Sunshine Rd.
Stillwater, OK 74074

RECEIPT NUMBER	DATE	PROFESSIONAL SERVICE	CHARGE	PAID	NEW BALANCE
11037	2-10	Composite (CASH)	17 50	17 50	—
	4-28	Bitewing	12 00		12 00
	5-2	Prophy	16 00		28 00
11038	5-14	pd. on acct. (CASH)		20 00	8 00
25798	5-25	Amal. MOD	16 00		
		Ext. tooth #1	16 00	16 00	8 00

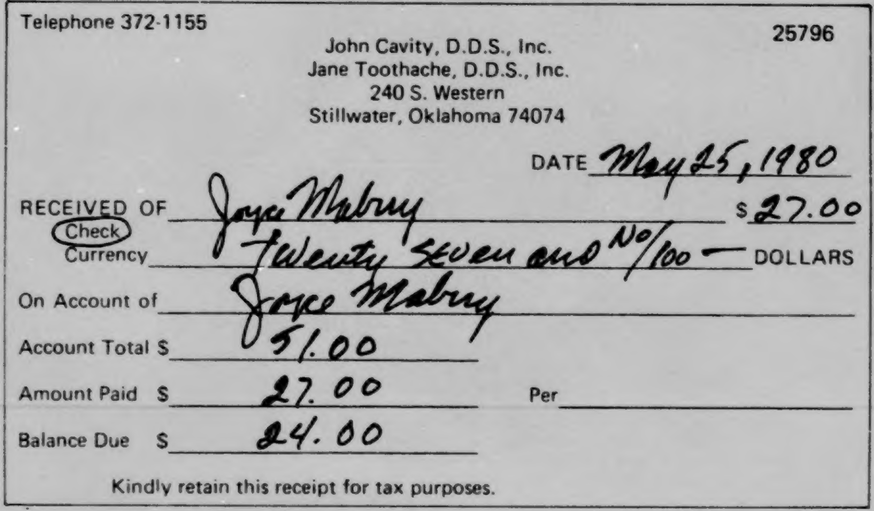
PAY LAST AMOUNT IN THIS COLUMN

O - OFFICE CALL
X - X-RAY
E - EXTRACTION
P - PROPHYLAXIS
S - SEDATIVE TREATMENT

SR - SILVER RESTORATION
GR - GOLD RESTORATION
PR - PORCELAIN RESTORATION
OS - ORAL SURGERY
CB - CROWN OR BRIDGE SERVICE

DS - DENTURE SERVICE
GT - GINGIVAL TREATMENT
CA - CORRECTIVE APPLIANCE
RP - REPARATIVE PROCEDURE
PA - PREPARATORY APPOINTMENT

RECEIPTS



Telephone 372-1155 25796

John Cavity, D.D.S., Inc.
Jane Toothache, D.D.S., Inc.
240 S. Western
Stillwater, Oklahoma 74074

DATE May 25, 1980

RECEIVED OF Joyce Mabry $27.00

[✓ Check] Currency Twenty seven and No/100 — DOLLARS

On Account of Joyce Mabry

Account Total $ 51.00

Amount Paid $ 27.00 Per

Balance Due $ 24.00

Kindly retain this receipt for tax purposes.

Telephone 372-1155 25797

John Cavity, D.D.S., Inc.
Jane Toothache, D.D.S., Inc.
240 S. Western
Stillwater, Oklahoma 74074

DATE May 25, 1980

RECEIVED OF Wanda Mayfield $28.00

Check [✓ Currency] twenty eight and $^{no}/_{100}$— DOLLARS

On Account of Wanda Mayfield

Account Total $ 28.00

Amount Paid $ 28.00 Per

Balance Due $ —

Kindly retain this receipt for tax purposes.

Telephone 372-1155 25798

John Cavity, D.D.S., Inc.
Jane Toothache, D.D.S., Inc.
240 S. Western
Stillwater, Oklahoma 74074

DATE May 25, 1980

RECEIVED OF Sarah Bardesis $20.00

[✓ Check] Currency DOLLARS

On Account of Sarah Bardesis

Account Total $ 20.00

Amount Paid $ 20.00 Per

Balance Due $ —

Kindly retain this receipt for tax purposes.

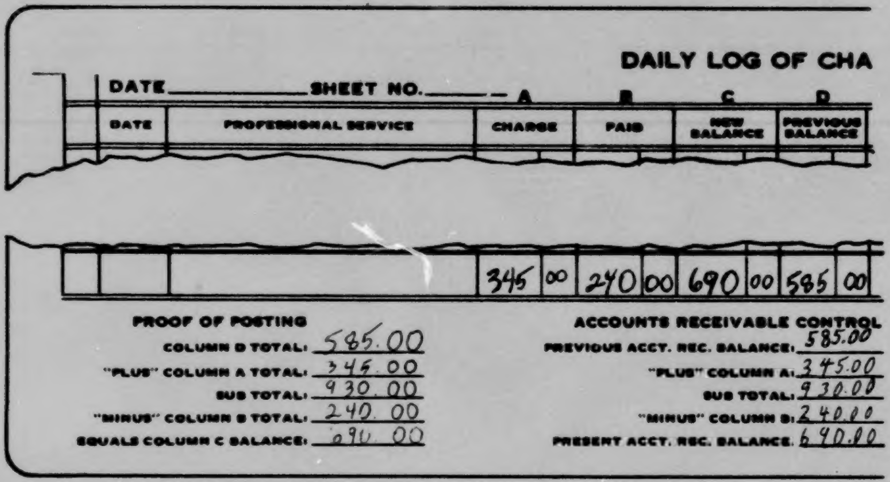
DAILY LOG/JOURNAL PAGE

		NAME	SERVICE RENDERED	√	CHARGE		PAID	
8	00							
	15							
	30							
	45							
9	00	Joyce Mabry	X-ray Survey		27	00	27	00
	15							
	30							
	45							
10	00	Wanda Mayfield	Prophy		16	00	16	00
	15		Bitewings		12	00	12	00
	30							
	45							
11	00	Sarah Bardesis	Amalgam MOD		16	00	16	00
	15		Ext. tooth #1		16	00	16	00
	30							
	45							
12	00							
	15							
	30							

Assignment Sheet #3

Evaluated to satisfaction of instructor

Assignment Sheet #4



DAILY LOG OF CHA

DATE__________ SHEET NO.______

DATE	PROFESSIONAL SERVICE	A CHARGE		B PAID		C NEW BALANCE		D PREVIOUS BALANCE	
		345	00	240	00	690	00	585	00

PROOF OF POSTING

COLUMN D TOTAL: 585.00

"PLUS" COLUMN A TOTAL: 345.00

SUB TOTAL: 930.00

"MINUS" COLUMN B TOTAL: 240.00

EQUALS COLUMN C BALANCE: 690.00

ACCOUNTS RECEIVABLE CONTROL

PREVIOUS ACCT. REC. BALANCE: 585.00

"PLUS" COLUMN A: 345.00

SUB TOTAL: 930.00

"MINUS" COLUMN B: 240.00

PRESENT ACCT. REC. BALANCE. 690.00

Assignment Sheet #5

1. $416.00
2. $528.00
3. $850.00

Assignment Sheet #6

CHECKING ACCOUNT DEPOSIT TICKET

NAME Margaret Reynolds D.D.S.

80 Next Door St, Fun City America

DATE July 10 19 81

CASH CURRENCY	137	00
CASH COIN		
	50	00
	120	00
	14	00
TOTAL FROM OTHER SIDE	35	00
TOTAL	396	00
NET DEPOSIT	396	00

[redacted]

86-00
1090

USE OTHER SIDE FOR ADDITIONAL LISTING

BE SURE EACH ITEM IS PROPERLY ENDORSED

Margaret Reynolds, D.D.S.
80 Next Door St.
Fun City, America 84620

Account Number

Back

CHECKS LIST SINGLY	DOLLARS	CENTS
1	35	00
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
TOTAL		

ENTER TOTAL ON THE FRONT OF THIS TICKET

CHECKING ACCOUNT DEPOSIT TICKET

NAME Your Name

DATE 19

CASH CURRENCY	56	00
CASH COIN		
	25	00
	55	00
	4	78
TOTAL FROM OTHER SIDE	67	52
TOTAL	208	30
LESS CASH RECEIVED		
NET DEPOSIT	208	30

[redacted]

86-00
1090

USE OTHER SIDE FOR ADDITIONAL LISTING

BE SURE EACH ITEM IS PROPERLY ENDORSED

Your Name

Account Number 77-150-1

Back

CHECKS LIST SINGLY	DOLLARS	CENTS
1	67	52
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
TOTAL		

ENTER TOTAL ON THE FRONT OF THIS TICKET

Assignment Sheet #7

DISBURSEMENTS AND EXPENSE RECORD MONTH 19

AT END OF MONTH ADD COLUMNS AND ENTER TOTALS IN MONTHLY RECAPITULATION

	DATE	PAID TO	CHECK NO.	FOR	AMOUNT PAID	CLERICAL SUPPLIES	LABORATORY	OFFICE SUPPLIES	OFFICE PAYMENT UPKEEP	UTILITIES	LAUNDRY	SALARIES	MISC.						OTHER ITEMS	AMOUNT
1	1/2	Clinitex Supply Co.	1	Clinical Supp.	144 15	144 15														
2	1/2	Realty Investment	2	Rent	800 00				800 00											
3	1/2	Ding-a-ling Telephone	3	Telephone	150 00					150 00										
4	1/4	Mary West	4	Wages	58 70							58 70								
5	1/4	City of Fun City	5	Taxes	9 06				9 06											
6	1/4	Peter Hook	6	Repair to office	30 00				30 00											
7	1/4	Prudential Ins.	7	Liability Ins.	24 60								24 60							
8	1/8	Pub. Service Elec. + Gas	8	Utilities	65 00					65 00										
9	1/9	Natl Dental Supply Com.	9	Supplies	18 75	18 75														
10	1/9	Mary West	10	Wages	58 70							58 70								
11	1/16	Trades Hotel	11	Dental Meeting	200 00								200 00							
12	1/18	Pure Cleaning Service	12	office cleaning	75 00				75 00											
13	1/19	Cable Company	13	Supply-ofc.	18 50			18 50												
14	1/19	SS white dental Manf. Co	14	Supp-clinical	85 00	85 00														
15	1/23	American Dental Association	15	Dues	125 00								125 00							
16	1/24	Assoc. for the Blind	16	Donation	25 00								25 00							
17	1/24	Coffee Bean Co.	17	Off. supplies	100 00			100 00												
18	1/25	Mary West	18	Wages	58 70							58 70								
19	1/26	Sterile Drape	19	clinical drapes	25 00	25 00														
20	1/26	Keystone Printing	20	stationery	35 75			35 75												
21	1/26	Hotel Traymore	21	convention	250 00								250 00							
22	1/27	Cash	22	personal	75 00								75 00							
23	1/27	Reale Towel Supp.	23	Laundry	15 45						15 45									
24	1/28	Reader's Digest	24	Off. magazine	4 63								4 63							
25	1/29	Dental Digest	25	Profess. mag.	35 00								35 00							
26	1/31	Warren Labortory	26	Lab.	175 00		175 00													
27	1/31	Easy Repair Co.	27	Typewriter repair	75 00			75 00												
28	1/31	Mary West	28	Wages	58 70							58 70								
29																				
30																				
31																				
32																				
33																				
34																				
35																				
36																				
37																				
38																				
39																				
40																				
41																				
42																				
43																				
44																				
TOTALS	(CARRY FORWARD IF MORE THAN ONE PAGE NEEDED)				2795 69	272 90	175 00	229 25	914 06	215 00	15 45	234 80	739 23							

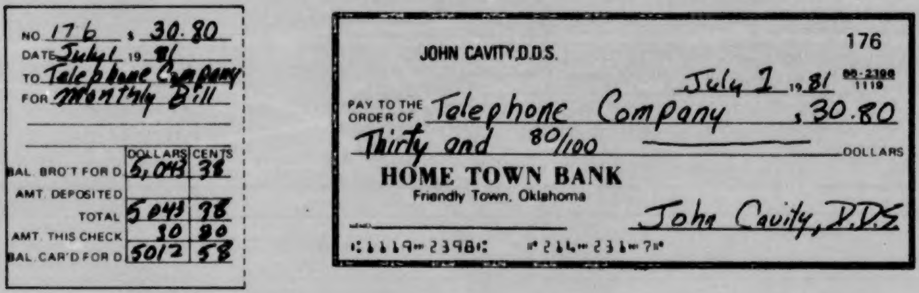
ASSIGNMENT SHEET #8

MONTH	CLINICAL SUPPLIES	LABORATORY	OFFICE SUPPLIES	OFFICE PAYMENT/UPKEEP	UTILITIES	LAUNDRY	SALARIES	MISC.
JANUARY	272.90	175.00	229.25	914.06	215.00	15.45	234.80	739.23
FEBRUARY	620.00	223.00	430.00	1,200.00	225.00	150.00	525.00	150.00
MARCH	444.00	200.00	180.00	990.00	236.00	75.00	525.00	400.00
APRIL	750.00	150.00	200.00	890.00	180.00	160.00	525.00	350.00
MAY	800.00	390.00	525.00	1,600.00	90.00	86.00	525.00	300.00
JUNE	500.00	290.00	300.00	1,700.00	96.00	200.00	565.00	250.75
JULY	320.00	330.00	150.00	950.00	125.85	400.00	525.00	340.00
AUGUST	85.00	223.00	730.00	1,300.00	240.00	57.00	525.00	60.00
SEPTEMBER	72.00	140.00	54.00	1,290.00	140.00	85.00	525.00	95.00
OCTOBER	920.00	340.75	75.00	1,329.00	65.00	64.00	525.00	45.00
NOVEMBER	500.00	140.00	45.00	1,400.00	100.00	50.00	525.00	89.00
DECEMBER	150.00	235.00	25.00	1,300.00	85.00	90.00	750.00	50.00
TOTALS	5,433.40	2,836.75	2,943.25	14,863.06	1,797.85	1,432.45	6,274.80	2,868.98

Assignment Sheet #9

Evaluated to satisfaction of instructor

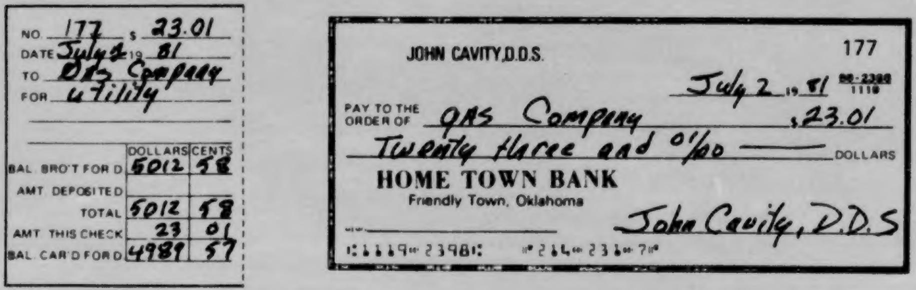
Assignment Sheet #10



NO 176 $ 30.80
DATE July 1 19 81
TO Telephone Company
FOR Monthly Bill

	DOLLARS	CENTS
BAL. BRO'T FOR'D	5,043	38
AMT. DEPOSITED		
TOTAL	5043	38
AMT. THIS CHECK	30	80
BAL. CAR'D FOR'D	5012	58

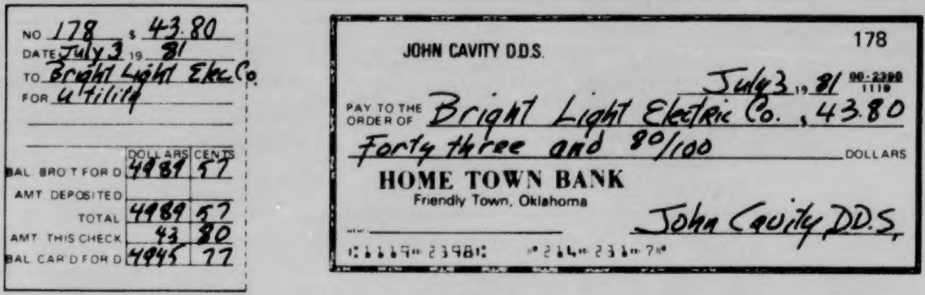
JOHN CAVITY,D.D.S. 176
July 1 19 81 88-2398 / 1119
PAY TO THE ORDER OF Telephone Company $ 30.80
Thirty and 80/100 DOLLARS
HOME TOWN BANK
Friendly Town, Oklahoma
John Cavity, D.D.S
⑆1119⑉2398⑆ ⑈214⑉231⑉7⑈



NO. 177 $ 23.01
DATE July 2 19 81
TO Gas Company
FOR utility

	DOLLARS	CENTS
BAL. BRO'T FOR'D	5012	58
AMT. DEPOSITED		
TOTAL	5012	58
AMT. THIS CHECK	23	01
BAL. CAR'D FOR'D	4989	57

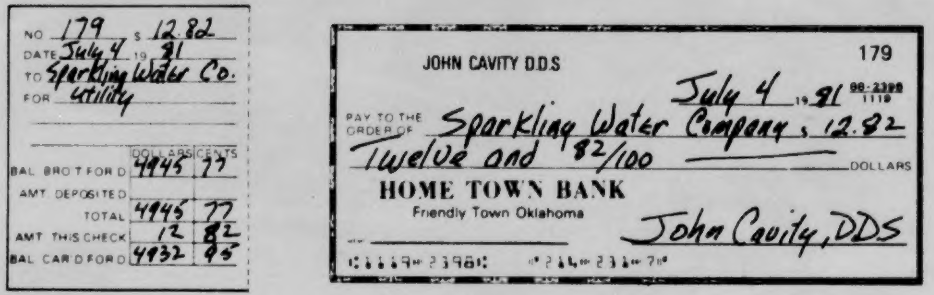
JOHN CAVITY,D.D.S. 177
July 2 19 81 88-2398 / 1119
PAY TO THE ORDER OF gas Company $ 23.01
Twenty three and 01/100 DOLLARS
HOME TOWN BANK
Friendly Town, Oklahoma
John Cavity, D.D.S
⑆1119⑉2398⑆ ⑈214⑉231⑉7⑈



NO 178 $ 43.80
DATE July 3 19 81
TO Bright Light Elec.Co
FOR utility

	DOLLARS	CENTS
BAL. BRO'T FOR'D	4989	57
AMT. DEPOSITED		
TOTAL	4989	57
AMT. THIS CHECK	43	80
BAL. CAR'D FOR'D	4945	77

JOHN CAVITY D.D.S. 178
July 3 19 81 88-2398 / 1119
PAY TO THE ORDER OF Bright Light Electric Co. $ 43.80
Forty three and 80/100 DOLLARS
HOME TOWN BANK
Friendly Town, Oklahoma
John Cavity D.D.S.
⑆1119⑉2398⑆ ⑈214⑉231⑉7⑈



NO 179 $ 12.82
DATE July 4 19 81
TO Sparkling Water Co.
FOR utility

	DOLLARS	CENTS
BAL. BRO'T FOR'D	4945	77
AMT. DEPOSITED		
TOTAL	4945	77
AMT. THIS CHECK	12	82
BAL. CAR'D FOR'D	4932	95

JOHN CAVITY D.D.S 179
July 4 19 81 88-2398 / 1119
PAY TO THE ORDER OF Sparkling Water Company $ 12.82
Twelve and 82/100 DOLLARS
HOME TOWN BANK
Friendly Town Oklahoma
John Cavity, DDS
⑆1119⑉2398⑆ ⑈214⑉231⑉7⑈

Assignment Sheet #10 (cont.)

NO 180 $ 40.00
DATE July 5 19 81
TO Friendly Cleaning Ser.
FOR Office cleaning

	DOLLARS	CENTS
BAL. BRO'T FOR'D	4932	95
AMT. DEPOSITED		
TOTAL	4932	95
AMT. THIS CHECK	40	00
BAL. CAR'D FOR'D	4892	95

JOHN CAVITY, D.D.S. 180
July 5 19 81 00-2398/1119
PAY TO THE ORDER OF Friendly Cleaning Service $ 40.00
Forty and no/100 DOLLARS
HOME TOWN BANK
Friendly Town, Oklahoma
John Cavity, D.D.S
⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

NO 181 $ 180.00
DATE July 6 19 81
TO Nat'l. Dental Supply Co.
FOR Dental Supplies

	DOLLARS	CENTS
BAL. BRO'T FOR'D	4892	95
AMT. DEPOSITED	550	00
TOTAL	5442	95
AMT. THIS CHECK	180	00
BAL. CAR'D FOR'D	5262	95

JOHN CAVITY, D.D.S. 181
July 5 19 81 00-2398/1119
PAY TO THE ORDER OF National Dental Supply $ 180.00
One Hundred eighty and no/100 DOLLARS
HOME TOWN BANK
Friendly Town, Oklahoma
John Cavity D.D.S
⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

NO 182 $ 37.75
DATE July 7 19 81
TO Big Letter Printing Co.
FOR Stationery

	DOLLARS	CENTS
BAL. BRO'T FOR'D	5262	95
AMT. DEPOSITED		
TOTAL	5262	95
AMT. THIS CHECK	37	75
BAL. CAR'D FOR'D	5225	20

JOHN CAVITY, D.D.S. 182
July 7 19 81 00-2398/1119
PAY TO THE ORDER OF Big Letter Printing Company $ 37.75
Thirty seven and 75/100 DOLLARS
HOME TOWN BANK
Friendly Town, Oklahoma
John Cavity D.D.S
⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

NO 183 $ 35.00
DATE July 8 19 81
TO Towel Supply Comp.
FOR Towels

	DOLLARS	CENTS
BAL. BRO'T FOR'D	5225	20
AMT. DEPOSITED		
TOTAL	5225	20
AMT. THIS CHECK	35	00
BAL. CAR'D FOR'D	5190	20

JOHN CAVITY, D.D.S 183
July 8 19 80 00-2398/1119
PAY TO THE ORDER OF Towel Supply Company $ 35.00
Thirty Five and no/100 DOLLARS
HOME TOWN BANK
Friendly Town, Oklahoma
John Cavity, D.D.S
⑆1119⑈2398⑆ ⑈214⑈231⑈7⑈

Assignment Sheet #11

JANE DOE, D.D.S.
BANK RECONCILIATION
JANUARY 31, 1980

Balance per Bank Statement $ 1810.41

+Deposit of 1-30-80 not on statement $ 500.00

$ 2310.41

Less Outstanding Checks

No. 9 -	$ 18.75
No. 11 -	$ 100.00
No. 12 -	$ 30.00
No. 15 -	$ 125.00
No. 24 -	$ 4.63
No. -	$
No. -	$

Total Outstanding Checks $ 278.38

Adjusted Bank Balance $ 2032.03

Balance per Checkbook $ 2035.00

Subtract

Debit Memo $

Service Charges $ 2.97

Adjusted Checkbook Balance $ 2032.03

Assignment Sheet #12

PART I

No. 1 Amount $ 10.00

PETTY CASH VOUCHER

Date 9-6

Paid to Marvell Pippin

For Postage stamps

Charge to Office Expense

Approved by Your Name

Received by Marvell Pippin

No. 2 Amount $ 5.00

PETTY CASH VOUCHER

Date 8-8

Paid to Susan Hedrick

For Coffee

Charge to Miscellaneous

Approved by Your Name

Received by Susan Hedrick

No. 3 Amount $ 12.00

PETTY CASH VOUCHER

Date 8-10

Paid to Kenneth Helt

For Repair to door

Charge to Miscellaneous

Approved by Your NAME

Received by Kenneth Helt

Assignment Sheet 12 (cont.)

No. 4 Amount $ 3.00
PETTY CASH VOUCHER
Date 8-13
Paid to Jean Grant
For Emergency Supplies
Charge to Miscellaneous
Approved by Your Name
Received by Jean Grant

No. 5 Amount $ 2.50
PETTY CASH VOUCHER
Date 8-19
Paid to Bonnie Glover
For Carbon Paper
Charge to Office Expense
Approved by Your Name
Received by Bonnie Glover

No. 6 Amount $ 3.00
PETTY CASH VOUCHER
Date 8-21
Paid to Sara Swartz
For Extension Cord
Charge to Office Expense
Approved by Your Name
Received by Sara Swartz

No. 7 Amount $ 3.50
PETTY CASH VOUCHER
Date 8-22
Paid to Gerry Hall
For pencils
Charge to Office Expense
Approved by Your Name
Received by Gerry Hall

No. 8 Amount $ 10.00
PETTY CASH VOUCHER
Date 8-28
Paid to Boy Scouts
For Donation
Charge to Miscellaneous
Approved by Your Name
Received by Boy Scouts of Ama

PART II

Office expenses	10.00	Miscellaneous	5.00
	2.50		12.00
	3.00		3.00
	3.50		10.00
TOTAL	19.00	TOTAL	30.00

PART III

PETTY CASH FUND		DATE	EXPLANATION	VOUCHER NO.	DISTRIBUTION OF PAYMENTS	
RECEIVED	PAID OUT				OFFICE EXPENSE	MISC. EXPENSES
50 00						
	10 00	8-6	Stamps	1	10 00	
	5 00	8-8	Coffee	2		5 00
	12 00	8-10	Repair to Lock	3		12 00
	3 00	8-13	Emerg. Supplies	4		3 00
	2 50	8-19	Carbon Paper	5	2 50	
	3 00	8-21	Extension Cord	6	3 00	
	3 50	8-22	Pencils	7	3 50	
	10 00	8-28	Boy Scouts	8		10 00
50 00		8-30				

Assignment Sheet #13

Evaluated to satisfaction of instructor

DENTAL ACCOUNTING
UNIT II

TEST

NAME____ SCORE____________

1. Match terms associated with business procedures to the correct definitions. Place the correct numbers in the blanks provided. Definitions are continued on the next page.

______a. Signature on an official document

______b. Permanent record of all expenditures for any given month

______c. Form showing amount owed; usually sent out the last of each month

______d. Form showing patient's name, services rendered, and fee charged

______e. Permanent individual patient form that shows charges, payments, services rendered, and balance due

______f. Involves management of all fees charged and payments received

______g. Total amount of cash and checks prepared for safekeeping

______h. Money used for miscellaneous office expenses

______i. System of recording and summarizing all financial transactions

______j. Permanent record showing each month's expenditures, charges and receipts, and yearly total for each

______k. Financial coverage purchased through various companies to assist in payment of unexpected health expenses

______l. Involves management of all expenses paid out for operation of an office

______m. Acknowledgment for cash paid; written in duplicate

______n. Permanent record that shows all patients' names, services rendered, total fees charged, and payments received

1. Business procedures
2. Accounts receivable
3. Accounts payable
4. Charge slip
5. Receipt
6. Statement
7. Ledger
8. Daily log/journal
9. Monthly expense sheet
10. Yearly summary sheet
11. Bank deposit
12. Health insurance
13. Endorsement
14. Petty cash

_____o. Refers to length of time that charges are overdue

_____p. Itemized list of cash and other funds which depositors present for credit to their accounts

_____q. Reimburses an employer for damages paid to an employee who has been hurt on the job

_____r. Numbered identification card given to individual after completing an application; used by employers and the Social Security Administration as a reference in the contributing of funds for social insurance

_____s. Law passed to inform consumers of the cost of borrowing and purchasing on credit

_____t. Completed by employee to determine withholding allowances for income tax purposes

_____u. Type of payment that doctor makes if he or she employs more than four people

_____v. Number assigned to employer by Internal Revenue Service, to be used in accounting process

_____w. Total of all wages and deductions withheld from the employee, to be used in filing income tax

_____x. Summary of employee's earnings, to be recorded quarterly for office files or reporting to government

15. Account age
16. Deposit slip
17. Social Security card
18. Employer identification number
19. Employee's earning record
20. Employee's withholding certificate (W-4)
21. Wage and tax statement (Form W-2)
22. Federal unemployment tax
23. Workmen's compensation insurance
24. Federal Truth in Lending Act

2. Describe responsibilities of the bookkeeping assistant in the spaces below.

____

____

____

____

____

3. List ways in which patients' accounts are handled.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

4. Match types of bookkeeping systems to their descriptions. Write the correct numbers in the blanks provided.

_____a. Involves use of computers and codes for procedures

_____b. Requires separate written entries on a ledger card, daily receipt, and log sheet

_____c. Provides in one writing entry on charge slip, daily journal, ledger card, receipt, appointment notice, and in some instances, a statement

1. Traditional log system
2. Pegboard (Write-it-once)
3. Data processing

5. Complete the following chart on steps to follow through a collection system. Write the correct information in the blanks provided.

ACCOUNT AGE	COLLECTION ACTION
End of the month or 30 days	a. ____________________
b. ____________________	Mail a second statement with a gently phrased reminder added by hand or typed. A pre-printed card, form letter, or sticker are easier but less effective alternatives
74 days	c. ____________________
d. ____________________	Send a stronger letter or collection form, definitely asking for prompt attention

6. Select from the list below items listed on charge slip and ledger. Mark each correct answer with an "X."

______a. Vital signs

______b. Date

______c. Patient's address

______d. Sex of patient

______e. Birthdate of patient

______f. Services rendered

______g. Itemized amount charged for services rendered

______h. Complete name, including first and middle names

______i. Total amount

______j. Prognosis

7. Arrange in order steps in using the daily log/journal page. Write a "1" to show the first step, a "2" to show the second step, and so on.

______a. Place a check mark in column by name to indicate that information has been transferred to ledger card

______b. Enter information from patient ledger card to daily log/journal page

______c. Give a receipt for payment if requested

______d. Enter information and charges from charge slip to patient ledger card during each visit

______e. Enter any payment received on account on the individual ledger cards, then on daily journal pages as "on account"

8. Arrange in order steps used to balance daily log/journal page. Write a "1" to show the first step, a "2" to show the second step, and so on.

______a. Total paid column

______b. Make sure that there is a check mark for each entry

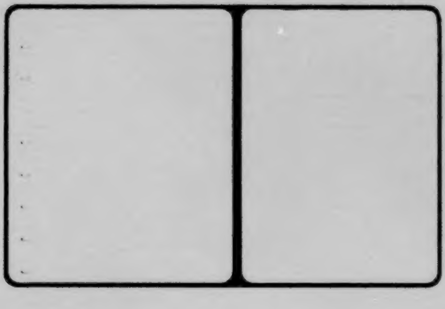
______c. Check appointment book to see that all patients' visits have been listed in daily log/journal page

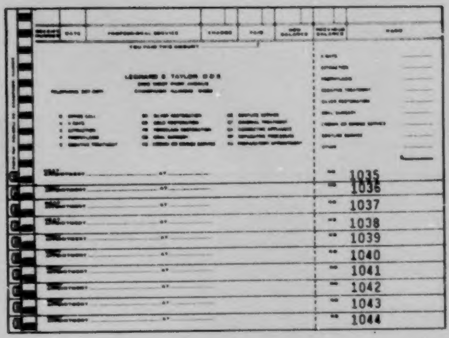
______d. Bring totals from the charge and paid columns forward to next page for balance forward

______e. Total charge column for amount of day's production

9. Identify the parts of pegboard system shown in the drawings below.

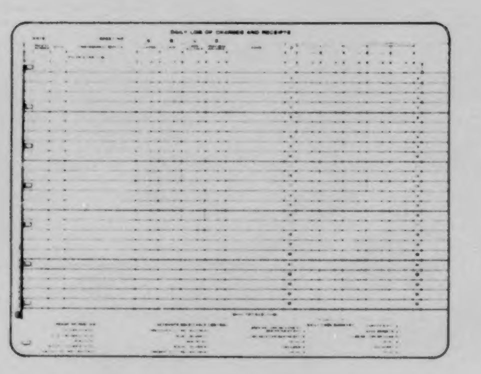
- Ledger card
- Fold-a-log pegboard
- Receipt and charge slip
- Daily log of charges and receipts (daily journal page)

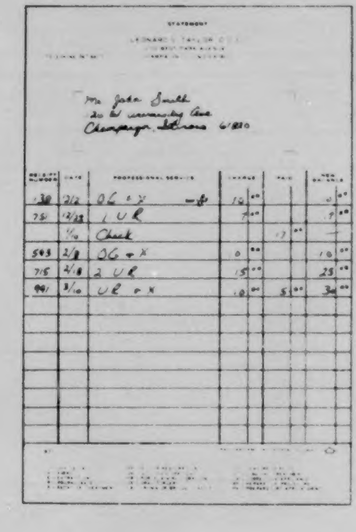



LEONARD E. TAYLOR D.D.S.
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044

a. ______________________________

b. ______________________________


DAILY LOG OF CHARGES AND RECEIPTS


STATEMENT
LEONARD E. TAYLOR D.D.S.

c. ______________________________

d. ______________________________

10. State two methods of balancing daily log/journal page in the pegboard system.

    a. ______________________________

    b. ______________________________

11. Match special entries in bookkeeping systems to the correct definitions. Write the correct numbers in the blanks provided.

    ______a. Money received from business hired to collect overdue accounts

    ______b. Special fee given to selected patients or professionals

    ______c. Check returned by bank due to lack of funds in account

    ______d. Partial or full payment to office from patient's coverage

    1. Non-sufficient funds (NSF)
    2. Courtesy discount
    3. Collection agency payment
    4. Insurance claims

12. Describe steps in making a bank deposit.

    a. ______________________________

    b. ______________________________

    ____

13. Select from the list below items that appear on a monthly expense sheet. Mark each correct answer with an "X."

    ______a. Office supplies

    ______b. Laboratory fees

    ______c. Laundry

    ______d. Salaries

    ______e. Miscellaneous

    ______f. Utilities

    ______g. Office payment and upkeep

14. Select from the list below items found on a record of employees' salaries and tax deductions. Mark each correct answer with an "X."

_____a. Date paid

_____b. Name of employee

_____c. Total exemptions

_____d. Dates and periods paid

_____e. Other pay deductions

_____f. Employee's birthdate

_____g. Federal income tax withheld

_____h. Gross salary

_____i. Social Security number

_____j. Employee's beneficiary

_____k. Social Security (FICA) tax withheld

_____l. Names of dependents

_____m. Net salary

15. Describe the process of depositing withheld income tax and Social Security (FICA) taxes.

____

____

____

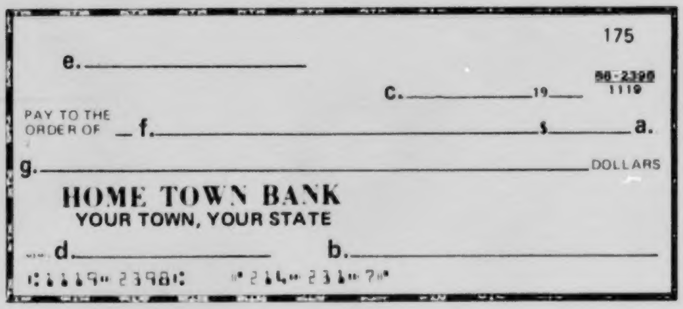
____

____

____

16. Identify parts of the check shown below. Write the correct names in the blanks provided.

Amount of check in figures
Name of person or firm
Date
Amount of check in words
Signature of person making payment
Purpose of check
To whom check is paid



175

e. ____________________

c. ______________ 19___ 98-2398 / 1119

PAY TO THE ORDER OF _ f. ______________________________ $ ________ a.

g. ______________________________________ DOLLARS

HOME TOWN BANK
YOUR TOWN, YOUR STATE

d. ____________________ b. ____________________

17. Select from the list below items needed on a check stub. Mark each correct answer with an "X."

______a. Date

______b. Purpose of check

______c. Amount deposited (if any)

______d. Name of bank

______e. To whom check is paid

______f. Amount of check

______g. Signature

______h. Number of check

______i. Total

______j. Account number

______k. Policy number

______l. Claim number

______m. Balance brought forward

18. Arrange in order the steps needed in reconciling bank statements. Write a "1" to show the first step, a "2" to show the second step, and so on until all the steps are numbered.

______a. Arrange cancelled checks numerically

______b. Check off (✓) all cancelled checks and deposits in the checkbook stub (register)

______c. Subtract total amount of outstanding checks from statement balance

______d. List outstanding checks (those not returned to bank) with check number and amount

______e. Make sure that adjusted bank balance and adjusted checkbook balance are equal

______f. Compare amount of cancelled checks and deposits with amounts written in checkbook stub (register)

______g. Verify amount of cancelled checks with amounts on bank statement

19. Describe handling of petty cash.

____

____

____

____

____

____

20. Distinguish between types of insurance programs. Write a "PR" to show private insurance programs, and a "PU" to show public insurance programs.

_____a. Professional organizations

_____b. Medicare

_____c. Commercial carriers

_____d. Medicaid

21. State six points to remember when handling insurance forms.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

22. Select from the list below basic information found on an insurance claim. Mark each correct answer with an "X."

_____a. Past medical history

_____b. Diagnosis/symptoms

_____c. Age of beneficiary

_____d. Description of services and charges

_____e. Relationship of patient to policyholder

_____f. Policyholder's salary

_____g. Group number or claim number

_____h. Policyholder's name

_____i. Number of dependents

_____j. Other health insurance coverage

_____k. Initial information

_____l. Amount of FICA payment

23. Compose collection letters.

24. Complete ledger card, receipt, and daily log/journal page.

25. Practice pegboard system.

26. Balance daily log in pegboard system.

27. Figure courtesy discounts.

28. Prepare a bank deposit.

29. Prepare monthly expense sheet.

30. Prepare yearly summary sheet.

31. Prepare record of employee's salaries and tax deductions.

32. Write a check and complete check stub.

33. Reconcile bank statement.

34. Complete petty cash summary.

35. Complete insurance form.

(NOTE: If activities 23-35 have not been finished before the test, ask your instructor when they should be completed.)

DENTAL ACCOUNTING
UNIT II

ANSWERS TO TEST

1. a. 13
   b. 9
   c. 6
   d. 4
   e. 7
   f. 2
   g. 11
   h. 14
   i. 1
   j. 10
   k. 12
   l. 3
   m. 5
   n. 8
   o. 15
   p. 16
   q. 23
   r. 17
   s. 24
   t. 20
   u. 22
   v. 18
   w. 21
   x. 19

2. Description should include:
   a. Develop an accurate routine system of keeping accounts
   b. Give complete and careful attention to every detail
   c. Provide accurate account of records and money involved
   d. Show ethical responsibility when handling confidential information

3. a. Patients pay cash
   b. Billed monthly
   c. Bills sent as soon as patient is discharged
   d. Patients pay fixed amount weekly or monthly
   e. Credit cards
   f. Health insurance

4. a. 3

b. 1

c. 2

5. a. Send the usual statement; this account is not yet overdue

b. 60 days

c. Make the first telephone contact with the responsible person

d. 90 days

6. b, c, f, g, h, i

7. a. 4

b. 2

c. 5

d. 1

e. 3

8. a. 4

b. 2

c. 1

d. 5

e. 3

9. a. Fold-a-log pegboard

b. Receipt and charge slip

c. Daily log charges and receipts (daily journal page)

d. Ledger card

10. a. Proof of posting

b. Accounts receivable control

11. a. 3

b. 2

c. 1

d. 4

12. Description should include:

    a. Endorse back of checks on left end

    b. Make out deposit slip with correct date, doctor's name, and itemized amount and total to be deposited

13. a, b, c, d, e, f, g, h

14. a, b, c, d, e, g, h, i, k, m

15. Description should include:

    a. Employer must deposit withheld income tax and Social Security taxes in an authorized commercial bank or Federal Reserve Bank

    b. Internal Revenue Service will send a Federal Tax Deposit Form 501 for reporting needed information

    c. Even though monthly deposits are made, it is necessary to file a quarterly report on Form 941

16. a. Amount of check in figures

    b. Signature of person making payment

    c. Date

    d. Purpose of check

    e. Name of person or firm

    f. To whom check is paid

    g. Amount of check in words

17. a, b, c, e, f, g, h, i, m

18. a. 2 e. 7

    b. 4 f. 3

    c. 6 g. 1

    d. 5

19. Description should include:

    a. Write check from office account for cash needed

    b. Fill out a numbered voucher each time money is taken from fund

    c. Balance amount of voucher and remaining cash to original amount of petty cash when fund is low or depleted

20. a. PR
    b. PU
    c. PR
    d. PU
21. Any six of the following:
    a. Know policies you see most often
    b. Learn benefits that pertain to your office
    c. Use a standard form when possible
    d. Obtain insurance information during patient's first visit
    e. Tell patient in advance when policy is not going to pay full fee
    f. Find out who will receive money from insurance company
    g. Use standard medical/dental terminology
    h. File claims as quickly as possible
    i. Follow up unpaid claims
    j. Learn rules for special situations
    k. Call insurance company representative if you have questions
22. b, d, e, g, h, j, k
23. Evaluated to satisfaction of instructor
24. Evaluated to satisfaction of instructor
25. Evaluated to satisfaction of instructor
26. Evaluated to satisfaction of instructor
27. Evaluated to satisfaction of instructor
28. Evaluated to satisfaction of instructor
29. Evaluated to satisfaction of instructor
30. Evaluated to satisfaction of instructor
31. Evaluated to satisfaction of instructor
32. Evaluated to satisfaction of instructor
33. Evaluated to satisfaction of instructor
34. Evaluated to satisfaction of instructor
35. Evaluated to satisfaction of instructor

CAREER SUCCESS
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to arrange in order steps to take in finding and securing a job and name sources of employment opportunities. The student should also be able to prepare a resumé, use the telephone to arrange a job interview, and evaluate personal habits associated with career success. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with career success to the correct definitions.
2. Arrange in order steps to take in finding and securing a job.
3. Name sources of employment opportunities.
4. Distinguish between public and private employment agencies.
5. Select from a list guidelines for dressing for an interview.
6. Discuss ways to increase self-satisfaction in a career.
7. Select from a list reasons why people lose jobs.
8. List ways to continue education in a chosen field.
9. Prepare a resumé.
10. Write a cover/application letter.
11. Complete employment application form.
12. Use telephone to arrange a job interview.
13. Participate in a job interview.
14. Evaluate a job offer.
15. Write a follow-up letter.
16. Compare job opportunities.
17. Ask for a raise.
18. Write a letter of resignation.
19. Evaluate personal habits associated with career success.
20. Improve listening skills.

CAREER SUCCESS
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

   A. Provide student with objective sheet.

   B. Provide student with information and assignment sheets.

   C. Discuss unit and specific objectives.

   D. Discuss information and assignment sheets.

   E. Provide the necessary information and equipment to complete assignment sheets.

   F. Invite resource persons from employment agencies, health care services, and personnel and departments to speak to students about interviews, job placement, and career and opportunity counseling.

   G. Use "Critical Steps in Job Interviewing" film and sound cassettes to assist student in learning interviewing competencies.

   H. Use role playing in Assignment Sheet #5 to practice for HOSA skill contest in Job Application and Interview.

   I. Lead a discussion about what to expect during on-the-job training.

   J. Give enclosed clinical progress report to dentist for evaluating student during on-the-job training.

   K. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Assignment sheets

      1. Assignment Sheet #1--Prepare a Resumé

      2. Assignment Sheet #2--Write a Cover/Application Letter

      3. Assignment Sheet #3--Complete Employment Application Form

      4. Assignment Sheet #4--Use Telephone to Arrange a Job Interview

      5. Assignment Sheet #5--Participate in a Job Interview

      6. Assignment Sheet #6--Evaluate a Job Offer

7. Assignment Sheet #7--Write a Follow-Up Letter
8. Assignment Sheet #8--Compare Job Opportunities
9. Assignment Sheet #9--Ask for a Raise
10. Assignment Sheet #10--Write a Letter of Resignation
11. Assignment Sheet #11--Evaluate Personal Habits Associated with Career Success
12. Assignment Sheet #12--Improve Listening Skills

D. Test

E. Answers to test

III. Unit references:

A. Eggland, Steven A., and Williams, John W. *Human Relations in Business.* Dallas: South-Western Publishing Co., 1977.

B. Sawatzky, Joyce et al. *Home Economics I: Basic Core.* rev. ed. Stillwater: Oklahoma State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1977.

C. Sloan, Jamee. *Health Service Careers.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1977.

IV. Additional references:

(NOTE: Only Oklahoma vocational teachers may order films from the State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma, 74074. Out-of-state teachers must purchase and/or rent materials from the addresses listed.)

A. "Your Job: Fitting In." Available from Coronet Films, Coronet Building, 63 East South Water Street, Chicago, Illinois 60601.

B. "Get That Job: Line Up Your Interview." Available from Coronet Films, Coronet Building, 63 East South Water Street, Chicago, Illinois 60601.

C. Helsel, Bob, and Threadgill, Peggy. *Critical Steps of Job Interviewing.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center and Adult Center for Vocational and Technical Education, 1978.

(NOTE: The *Critical Steps of Job Interviewing* program is designed to assist students in developing basic interviewing competencies. The 3 1/2-4 hour program includes programmed reading exercises, listen-respond exercises, and structured role plays. The administrator's kit includes instructor's manual, 16 mm film, and five cassettes packaged in a case. The program may be purchased from State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074.)

DA - 199-H

CAREER SUCCESS
UNIT III

SUPERVISED CLINICAL PROGRESS REPORT

(To be completed by the dentist)

Names:

Doctor: ______________________ Date: From ______ To ________

Student: ______________________

Dental Assistant: __________________

Rating scale: 4 OUTSTANDING 3 ABOVE AVERAGE
2 AVERAGE 1 BELOW AVERAGE

I will visit your office periodically. If you have anything you wish to discuss with me, please arrange time at your convenience or call at the school.
Phone ______________

Both your assistant and you should confer on the rating scale evaluation. Please do not compare the student with your experienced assistant. All information is kept confidental.

	Please circle number
1. Grooming and Hygiene	
is clean and neat about apparel	4 3 2 1
2. Initiative	
is able to work with normal amount of assistance	4 3 2 1
3. Public Relations	
adapts to various situations	4 3 2 1
expresses self well	4 3 2 1
shows emotional stability with patients	4 3 2 1
4. Knowledge of dental services	
understands technical terms for dental procedures	4 3 2 1
associates instruments with particular procedures	4 3 2 1
knows proper methods of preparation for respective materials	4 3 2 1
relates fundamental dental economics to the operation of dental business office	4 3 2 1

5. Performance

exhibits a fundamental skill in manipulation of materials	4 3 2 1
chairside assisting	4 3 2 1
following instructions	4 3 2 1

GENERAL COMMENTS:

Would you recommend this student for a position? YES ________ NO ____________

Student could profit from suggestions for improvement in these areas: ____________

Student shows strength in these areas: ____________

ADDITIONAL COMMENTS:

What is your overall appraisal of this STUDENT?

Outstanding Above average Average Unsatisfactory

Signed: ____________

Date: ____________

CAREER SUCCESS
UNIT III

INFORMATION SHEET

I. Terms and definitions

A. Interview--Meeting of prospective employer and job applicant for evaluation and questioning

B. Resumé--Written statement or summary of information about an individual that would be of interest to a prospective employer; may also be referred to as personal data sheet

C. Blind ad--Classified advertisement that does not identify the advertiser

(NOTE: Applicant is asked to send a letter or application and resumé to a post office box number or to call a certain number.)

Example:

> Dental Assistant
> 8:00 a.m.-5:00 p.m.
> No Weekends or Holidays
> P.O. Box 667 Sometown, Somestate

D. Help wanted ad--Advertisement telling what kind of job is available and what qualifications are required

Example:

> Dental Assistant
> Wanted to work in Orthodontic
> office. Must have exper. in
> clerical and dental practices.
> Phone 428-5151 for an appointment.

E. Employment/situation wanted ad--Classified advertisement placed by individual seeking employment indicating the job seeker's qualifications

Example:

> Experienced Dental Assistant
> seeking work in private or group
> practice. 1 year exper. and
> graduate of vo-tech training
> program. Call 547-9870 after
> 3:00 p.m.

F. Employment agency--Business designed to help individuals find employment

(NOTE: These agencies are excellent resources for dental assistants, dental secretaries, or receptionists in dental offices.)

G. Employment application form--Printed form on which job applicant records information about personal history, job history and experience, education, and references

INFORMATION SHEET

H. Technical knowledge--Information about a job and the skills needed to adequately perform it

Example: A dental assistant must be able to make appointments, keep basic set of books, and perform chairside assistance

I. Human relations--Continuous process of getting along with people

J. Ethics--Code or standard of behavior; professional conduct

K. Attitude--Feelings about people, things, and ideas

(NOTE: An attitude can make or break your job. Your role in the health field will put you in contact with many different people in many varied situations and will entail thinking through how you feel and how you will react.)

L. Communication--Sharing of a message or an idea which results in a high amount of understanding between the sender and the receiver of the message

M. Habit--Action that is acquired and has become automatic; tendency to perform a certain action

N. Learning attitude--On-going alertness for any new knowledge or training

O. Job enrichment program--Activity designed for technical development and worker improvement; may be in the form of seminar, workshop, or short conference

(NOTE: Many institutions and organizations hold workshops, institutes, or short courses to bring the health worker up-to-date on new equipment and techniques. Many employers are willing to provide the time and sometimes the finances for an employee to attend these programs.)

P. Liability insurance--Policy that covers health worker in case of accident or injury to person receiving care

Example: Patient slips and falls in operatory and charges dental assistant with negligence in care; the insurance will cover the charges if proven

(NOTE: Many facilities and professional people carry liability insurance to cover their employees. Many professional organizations and insurance companies have special policies that health workers may purchase. It is advisable that workers have some type of liability insurance to cover them as they work with the public.)

INFORMATION SHEET

II. Steps to take in finding and securing a job

(NOTE: You may not get the job the first time and that first interview may not be what you expected. Do not be discouraged; look at the experience as a learning situation. Evaluate yourself and work to improve the weak points and polish the good ones.)

A. Write down a complete self-inventory

(NOTE: Consider your abilities, experience, training, personality, desired working conditions, and what you want from life. Also consider your limitations and your need for more training and/or education. You might have to take lesser jobs first to get more experience to qualify for the job you desire. BE HONEST WITH YOURSELF.)

B. Make a list of employer possibilities

C. Make a list of possible contacts to help you in your job search

D. Prepare for a job interview (Assignment Sheets #1--#5)

(NOTE: Decide on the method of seeking the job interview. Would a telephone call or a letter be better? Will you need a resumé? Decide on a follow-up method if the interview is not decisive.)

E. Estimate salary

(NOTE: Look at the newspaper to get an idea of the pay range for the job. Age and experience are factors in determining starting pay. If the letters DOE appear in the ad, the salary depends on the applicant's experience. Imagine yourself hiring you. What do you have to sell and of what value is it to a prospective employer?)

III. Sources of employment opportunities

A. Other people

(NOTE: Tell people that you are job hunting. The more people who are aware that you are interested in obtaining a job, the better your chances for locating employment.)

Examples: Teachers, counselors, ministers or priests, friends, relatives, neighbors, acquaintances, political officials, business, people, professionals in the dental field

B. Newspapers

(NOTE: Use situation wanted columns, help wanted ads, general listings by employment agencies, and blind ads.)

C. Employment agencies

INFORMATION SHEET

D. Former employers

(NOTE: Ask for references to other business people and for a letter of recommendation.)

E. Personnel offices of health facilities

F. School placement services

G. Professional journals and newsletters

IV. Employment agencies

A. Private agencies

1. Charge placement fee for services

(NOTE: For fee-paid jobs, the employer pays the placement fee.)

2. Collect fee when employment is secured

3. Request signed contract between you and agency

4. Are controlled by state laws

B. Public agencies

1. Do not charge placement fee for services

2. Are supported by state or federal government funds

3. Are controlled by state laws

4. Give aptitude tests and counseling if needed

V. Guidelines for dressing for an interview

A. Consider type of job

(NOTE: You should not wear a uniform when seeking employment, but do dress neatly and appropriately.)

B. Dress to fit salary range for which you are applying

C. Consider age of the interviewer

(NOTE: Older people generally prefer more conservative dress.)

INFORMATION SHEET

D. Coordinate clothing

(NOTE: Consider colors, patterns, and fabrics suitable for the shape of your face and body structure.)

E. Be conservative

(NOTE: In most cases, avoid high-fashion items and faddish looks.)

Examples: Traditional shoes vs. high-heeled shoes, simple jewelry, natural-looking makeup, no strong colognes or aftershaves, no sunglasses worn during the interview

F. Be modest

G. Be well-groomed

(NOTE: Health workers should look very clean and neat. Hair needs to be simple, clean, and pulled back away from face. Nails should be clean and moderately short. If dress code is not mentioned during interview, ask if uniform is required and what type.)

VI. Ways to increase self-satisfaction in a career

A. Have a positive attitude

B. Be enthusiastic

C. Keep an open mind

(NOTE: Try to learn something new each day. In the dental field, new equipment and new techniques are being tried each day and you can be the most up-to-date worker if you will be receptive.)

D. Read all of the journals, newsletters, and textbooks available that pertain to your profession

E. Join and be active in your professional organizations

F. Volunteer to attend any workshops or in-service programs that your facility might offer

(NOTE: The more you know about your job and your profession, the happier you will be. If you want to further your education and training, set realistic goals and work toward them.)

VII. Reasons why people lose jobs

A. Lack of technical knowledge

(NOTE: Lack of or low ability to execute skills required in a particular job can account for loss of employment. Look at all available opportunities to learn needed skills or to brush up on skills in which you feel weak.)

INFORMATION SHEET

B. Poor human relations and attitude

(NOTE: The biggest factor of all is how you conduct yourself with the health team, the patients, and their families. If you are not a "people person," then you may want to look for an occupation that does not require working with the public.)

C. Low dedication to work ethic

Examples: Continual tardiness, calling in sick at the last moment or not at all, poor grooming habits, dishonesty in your work, disloyalty to your place of employment, carelessness

(NOTE: Employers and the people you care for deserve your very best. You should strive to do your best and give the care and concern that you would want to receive. In return, you have the right to work in an atmosphere of appreciation for your efforts and one in which you are able to learn and grow in your profession.)

VIII. Ways to continue education in a chosen field

A. In-service programs

B. Junior colleges and universities

C. Courses offered by professional organizations

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #1--PREPARE A RESUMÉ

NAME ____ SCORE ____________

Your resumé represents YOU on paper. This leaves the first impression of you with your prospective employer and may decide if you will get the interview. A GOOD RESUMÉ SHOULD IMMEDIATELY GIVE PROSPECTIVE EMPLOYERS A BRIEF SUMMARY OF YOUR ACCOMPLISHMENTS, EDUCATIONAL BACKGROUND, WORK EXPERIENCE, SKILLS, AND JOB OBJECTIVE. In short, what can you do for them?

Using the information given below, write a resumé to be included with your letter of application. You may use the same ad for which you choose to write your letter of application or select another one from your local newspaper.

1. Inspect several resumé formats and choose one that best fits your needs, or use the example on the following page as a guide.

2. Type your resumé on 8-1/2" x 11" white paper. Try not to exceed one page, but try to fill the page.

3. Use parallel constructions to insure a consistent writing style.

4. Phrase concisely but avoid using abbreviations.

5. Spell correctly. Many employers will not consider persons who have resumés that include misspelled words.

6. Put your name prominently at the top in the center or upper right-hand corner. Beneath your name, give your full street address, city, state, zip code, telephone number with area code, and a number where messages can be accepted.

   (NOTE: If you are applying for jobs out of town, leave space to type local phone number, address, and dates available.)

7. Do not include birthplace, age, health, height, weight, sex, marital status, photo, salary, or reasons for leaving job. Avoid mentioning religious and political affiliations.

   (NOTE: The whole point of the resumé is to get employers interested in meeting you in person. The above information may or may not come out in the interview, but by not including this information, there is little chance of discrimination. However, if you feel that you would benefit by adding the above information, you may do so.)

8. Describe your job objective or career goal briefly. Don't restrict yourself to a specific job unless you are quite experienced.

ASSIGNMENT SHEET #1

9. Describe your educational background, giving dates of enrollment, diploma or degrees received, and names of schools attended. Include grade average (if favorable) and major course of study. If you include school grades, be sure they are related to the jobs you have in mind. If pertinent, mention additional or graduate courses, scholarships, and summer school courses or workshops.

   (NOTE: Applicants with less than one year of work experience should list education before work experience; with more than one year, put experience first. IN RESUMÉ WRITING, ACCENTUATE THE POSITIVE, ELIMINATE THE NEGATIVE.)

10. List your past employment, starting with the most recent job. Carefully examine all the jobs you've performed, including extracurricular activities. CONCENTRATE ON THE SKILLS: don't categorize "summer jobs."

    (NOTE: The list should include the name of the office, your job title, and your major duties. The starting and termination dates for each job should be listed. Most employers ask during interviews why you left previous jobs. Try to be positive in stating your reasons for leaving a former job. Avoid downgrading your previous employers.)

11. List skills useful to the job. Remember, you have to prove your value to the office, especially if you have little experience.

    (NOTE: Use active verbs to indicate the specific tasks you performed, initiated, directed, or planned.)

    Examples: Developed and mounted X-rays; seated and draped patients

12. Include the following information if it is relevant and if there is enough space: hobbies and interests, extracurricular activities, clubs, honors you have received.

13. List or be ready to list at least three persons whom you have asked to give you a recommendation.

    (NOTE: Use business references, teachers, and character references. Avoid listing relatives unless you have actually worked for them on a salaried basis. Include some method for prospective employer to acquire references.)

14. Write *confidential* at the top of the resumé and letter to alert the reader that you don't want your current employer to know you are looking for another job.

    (NOTE: Try to give a telephone number where you can receive confidential calls.)

15. Have local printer shop retype your resumé and reproduce several copies. Request white bond paper.

    (NOTE: Your resumé's physical appearance is VERY IMPORTANT. Avoid using ditto or carbon copies. Be sure to proofread the printer's work. Always bring extra copies to interview.)

ASSIGNMENT SHEET #1

EXAMPLE OF RESUMÉ

CONFIDENTIAL

Jo Cross

Address	Present	Permanent
	1342 Normal City, State Zip Code	Same

Job Objective — Career as a dental assistant

Education — City High School, Perry, Oklahoma, 1979-1983

Advance Area Vo-Tech School, City, State. 1983
Certificate: Dental Assistant
Grade Average: 3.5 on a 4.0 scale

Work Experience — Dental Plaza, Near City, State. June 1982-1983
Duties included making appointments, typing records, and greeting patients

Pizzario, City, State. February 1980-August 1981
Recorded customers' orders, operated cash register, ordered supplies

Special Skills — Type 60 words per minute, use dictaphone, file records, use pegboard record keeping system, and use calculator

School Activities — High School Glee Club, President of HOSA chapter, and member of Bomberettes Pep Squad

References — Names and addresses of references will be listed on separate sheet.

(NOTE: Be prepared to have a completed list of names, addresses, and phone numbers of references in advance of interview. Be sure that you have received verification from these persons that they will give you a recommendation.)

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #2--WRITE A COVER/APPLICATION LETTER

NAME ______________________________ SCORE ____________

The cover/application letter is a sales technique to tell the employer how your abilities will be useful to the company. The letter should specify your qualifications, while the resumé gives general background information.

Use the sheet of ads at the end of this assignment sheet or select one from your local paper and write a cover/application letter to accompany the resumé you prepared in Assignment Sheet #1. Use the following information and the sample letters as guides.

(NOTE: If you cannot type, it is recommended that you write or print NEATLY using blue or black ink.)

1. Form and appearance
   a. Type or write neatly.
   b. Write on only one side of paper.
   c. Avoid smudges and typographical errors.
   d. Use 8 1/2" x 11" white bond paper, not personal or fancy paper.
   e. Spell, capitalize, and punctuate correctly.
   f. Put employer's full name, title, and address in inside address.
   g. Include your full name and address with zip code on the letter.
2. Information
   a. Write to a specific person.

      (NOTE: Find out the name of the dentist/personnel manager/employer you want to reach and the correct title. When in doubt, write to the top person who will refer your resumé to the right party. Use To Whom It May Concern if answering a blind ad.)

   b. Be brief; do not repeat information already in the resumé.
      1. State the position for which you are applying.
      2. Avoid needless details.
      3. Cover all points requested in the advertisement in exactly the order for which they are asked.

         (NOTE: Some prospective employers make it a point of testing the applicant's ability to follow directions.)

ASSIGNMENT SHEET #2

c. State reason for interest in job.

(NOTE: Employers look for people who desire future advancement opportunities rather than just a paycheck.)

d. Refer briefly to the main points in the attached resumé.

e. Mention that persons listed on the resumé have given their permission to serve as references.

f. Request interview at employer's convenience.

   1. Tell where you can be reached.

   2. Enclose self-addressed envelope and resumé.

   3. Say you will phone next week.

3. Attract attention in opening paragraph.

Examples:

Dear Employer:

My experience in office management would be of interest to you.

Dear Employer:

Have you wished you had an assistant who has experience in performing basic laboratory procedures and assisting with patient education? I might be the one.

Dear Employer:

____________________ has informed me that you are in need of a person who can type quickly without error, make appointments, and assist at chairside efficiently. I believe my experience in the dental assistant program has taught me to handle these tasks in an appropriate manner.

4. End the letter properly.

(NOTE: *Sincerely yours* or *Very truly yours* is appropriate.)

5. Use permanent address for the return address and be sure to include the correct date.

6. Staple letter to resumé, as it may be circulated to several departments and otherwise become detached.

7. Follow up and phone for an appointment a week letter.

(NOTE: Don't be surprised if the resumé has been referred to another department. Remember, they are in business and you may not get immediate attention, especilly if you sent a blind letter. Do not give up, but keep trying until you reach the right person and ask for a convenient date to set up an interview.)

ASSIGNMENT SHEET #2

8. Keep in touch regarding possible openings now and in the future.

   (NOTE: The "job hunt" may take several weeks or even months. It's important to keep your contacts alive without being a nuisance.

   Read the sample letters on the following pages and answer the questions below.)

9. a. What are examples of poor form in the first application letter?

   b. How did the second letter improve?

10. Write your own letter on a separate piece of paper using one of the ads at the end of this assignment sheet.

THERE IS NOT "BEST TIME" TO LOOK FOR A JOB. THE "BEST TIME" IS WHEN YOU AND THE JOBS ARE AVAILABLE.

ASSIGNMENT SHEET #2

Dr. B. Curry
609 Shining Knight Ave.
Castle Dental Clinic
Smalltown, USA zip code

Dear Ben,

I just love working with people and injoy the dental work. I saw an add in your paper and would like to talk to you about work.

I worked in an office about a year ago so I have some experience.

The school for Dental Assistants sounds interesting and I think I will apply

Will call you soon.

Your friend
Nancy Nightengale

ASSIGNMENT SHEET #2

1505 N. Camelot
Smalltown, USA Zip

Date

Ben Casey, D.D.S.
609 Shining Knight Avenue
Castle Dental Clinic
Smalltown, USA Zip Code

Dear Dr. Casey:

Please consider this letter an application for the position of dental assistant for which you have advertised in the *Smalltown Daily Post*.

After graduating from high school, I worked part time at the Belltower Dental Complex as a receptionist. I took basic typing and bookkeeping courses in high school and enjoy working with people. I decided to enter the health field and have been attending the Lancelot Vo-Tech School's dental assistant program. Graduation will take place August 5, 19--, and I will be ready for employment on August 10.

I would appreciate the opportunity to come in and talk with you at your convenience. I may be reached at the above address or by telephone at 399-9930.

Sincerely yours,

Nancy Nightengale

Nancy Nightengale

ASSIGNMENT SHEET #2

Dental Assistant

Full & part time duties will include assistance in patient education, simple lab and X-ray, appt. scheduling, daily log, light typing. Happy Tooth Clinic, 5201 Classic, 824-1450

Periodontic Office

Seeks Dental Assistant for comb. chairside and clerical duties. Must be certified and have at least 3 yrs. exper. Will train in this spec. area. Contact Dr. Temporal, D.D.S., 664-0018

Oral Surgery Clinic

Full time upfront Dental Assistant needed. 8am-5pm Weekdays. No Holidays. Basic lab and clerical skills needed. Call after 3:00 p.m. 450-2229

CERTIFIED DENTAL ASSISTANT

for Industry-based office. Good hours, fringe benefits, and wages depending on exper. Contact Johnnie Mark, Dental Supplies, Inc., 4200 Industrial Blvd., 555-0996 Equal Opp. Emp. M/F

DA for Pedodontic Office

DA needed to assist in basic chairside for children. Lab skills and X-ray exper. nec. Full time 7:30 am-6:30 pm Weekdays. Contact Ms. Wellington at 734-9570

DENTAL POSITIONS OPEN

Need trained Dental Assistants for all types of dental work. Contact LOU at **POSITIVE PERSONNEL EMP. AGENCY 226-7878**

DENTAL ASSISTANT NEEDED IN UNIQUE OFFICE

9:00am-4:00pm

NO SMOKING PLEASE

Opp. right for qualified DA to work in chairside assisting. Must be willing to learn and have initiative. Write Box 10, Pinevalley Gen. Delivery

DENTIST ASST.

Exp. nec. typing, books, clinical skills, 9-5 Daily. No holidays. Good benefits. Contact Welby Dental Clinic, 2453 West St.

Dental Office Nurse. Private office. 8 to 5 weekdays. Salary negotiable. 932-4540

NEED IMMEDIATELY
Assistant in dental office. Needs collection exper. and record keeping background. 9-4 daily and 9-12 Sat. Good pay, real challenge. Call 758-4098 NOW.

POSITIONS OPEN
IN THE HEALTH FIELD
YOU ARE NEEDED FOR
CHALLENGING JOBS WITH
GOOD PAY & BENEFITS

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #3--COMPLETE EMPLOYMENT APPLICATION FORM

NAME ______________________________ SCORE __________

Complete the following application form using the guidelines below. Use information corresponding to the classified ad and to your letter of application. Use information about yourself from your resumé.

(NOTE: Although each facility uses its own form, general rules of preparation apply to any form.)

1. Be prepared.
    a. Take pen and pencil with you.
    b. Take copies of your resumé.
    c. Be prepared to do transcribing and typing if asked.
2. Look over entire form before starting to write; do not hurry.
3. Follow directions.
    a. Note whether information is to be printed or handwritten.
    b. Carry out all directions.
4. Write clearly, neatly, and legibly.
5. Answer briefly.
6. Be honest.
7. Answer all questions.

    (NOTE: If questions do not apply to you, write *not applicable* or *NA* in the space to show that you did not overlook the question.)
8. Include complete information; use resumé.
9. RECHECK application when finished.
10. Avoid cross-outs and obvious erasure marks.
11. Do not list any restrictions to the geographic area in which you would work unless you would absolutely not consider other geographic areas.
12. Use the word *open* for questions about minimum salary since most employers pay standardized rates and will not negotiate on this.

ASSIGNMENT SHEET #3

"WE ARE AN EQUAL OPPORTUNITY EMPLOYMENT COMPANY. WE ARE DEDICATED TO A POLICY OF NON-DISCRIMINATION IN EMPLOYMENT ON ANY BASIS INCLUDING RACE, CREED, COLOR, AGE, SEX, RELIGION OR NATIONAL ORIGIN OR PHYSICAL DEFECTS"

APPLICATION FOR EMPLOYMENT

PERSONAL INFORMATION

DATE

NAME
LAST FIRST MIDDLE

PRESENT ADDRESS
STREET CITY STATE ZIP

PERMANENT ADDRESS
STREET CITY STATE ZIP

PHONE NO SOCIAL SECURITY NUMBER

REFERRED BY

EMPLOYMENT DESIRED

POSITION DATE YOU CAN START SALARY DESIRED

ARE YOU EMPLOYED NOW? IF SO MAY WE INQUIRE OF YOUR PRESENT EMPLOYER

EVER APPLIED TO THIS COMPANY BEFORE? WHERE WHEN

EDUCATION	NAME AND LOCATION OF SCHOOL	YEARS ATTENDED	DATE GRADUATED	SUBJECTS STUDIED
GRAMMAR SCHOOL				
HIGH SCHOOL				
COLLEGE				
TRADE, BUSINESS OR CORRESPONDENCE SCHOOL				

SUBJECTS OF SPECIAL STUDY OR RESEARCH WORK

U. S. MILITARY OR NAVAL SERVICE RANK PRESENT MEMBERSHIP IN NATIONAL GUARD OR RESERVES

ACTIVITIES OTHER THAN RELIGIOUS (CIVIC, ATHLETIC, FRATERNAL, ETC.)

EXCLUDE ORGANIZATIONS THE NAME OR CHARACTER OF WHICH INDICATES THE RACE, CREED, COLOR OR NATIONAL ORIGIN OF ITS MEMBERS.

(CONTINUED ON OTHER SIDE)

ASSIGNMENT SHEET #3

FORMER EMPLOYERS (LIST BELOW LAST FOUR EMPLOYERS, STARTING WITH LAST ONE FIRST.)

DATE MONTH AND YEAR	NAME AND ADDRESS OF EMPLOYER	SALARY	POSITION	REASON FOR LEAVING
FROM				
TO				
FROM				
TO				
FROM				
TO				
FROM				
TO				

REFERENCES: GIVE BELOW THE NAMES OF TWO PERSONS NOT RELATED TO YOU, WHOM YOU HAVE KNOWN AT LEAST ONE YEAR.

NAME	ADDRESS	BUSINESS	YEARS ACQUAINTED
1			
2			

PHYSICAL RECORD:

LIST ANY PHYSICAL DEFECTS

WERE YOU EVER INJURED? GIVE DETAILS

HAVE YOU ANY DEFECTS IN HEARING? IN VISION? IN SPEECH?

IN CASE OF EMERGENCY NOTIFY

NAME ADDRESS PHONE NO.

I AUTHORIZE INVESTIGATION OF ALL STATEMENTS CONTAINED IN THIS APPLICATION. I UNDERSTAND THAT MISREPRESENTATION OR OMISSION OF FACTS CALLED FOR IS CAUSE FOR DISMISSAL. FURTHER, I UNDERSTAND AND AGREE THAT MY EMPLOYMENT IS FOR NO DEFINITE PERIOD AND MAY, REGARDLESS OF THE DATE OF PAYMENT OF MY WAGES AND SALARY, BE TERMINATED AT ANY TIME WITHOUT ANY PREVIOUS NOTICE.

DATE SIGNATURE

DO NOT WRITE BELOW THIS LINE

TO BE COMPLETED DAY EMPLOYMENT BEGINS

DATE

HEIGHT WEIGHT AGE DATE OF BIRTH

SINGLE MARRIED WIDOWED CITIZEN U.S.A. SEX

THE ABOVE INFORMATION NEEDED FOR PENSION, HOSPITALIZATION, INSURANCE, ETC., AND NOT FOR HIRING PURPOSES

INTERVIEWED BY DATE REMARKS

NEATNESS		CHARACTER	
PERSONALITY		ABILITY	

HIRED FOR DEPT. POSITION WILL REPORT SALARY WAGES

APPROVED 1. EMPLOYMENT MANAGER 2. DEPT. HEAD 3. GENERAL MANAGER

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #4--USE TELEPHONE TO ARRANGE A JOB INTERVIEW

NAME ____ SCORE ____________

Making an appointment by phone does two things. First, it shows that you are interested in saving the employer's time. Second, it shows that you are thoughtful for asking what would be the best time for the employer to see you.

Role play a situation where you make an appointment by phone using the guidelines listed below. After you have completed the roleplay, use the checklist on the following page to check your performance.

Follow these steps in making an appointment by phone:

1. Plan what you are going to say before you call.

   (NOTE: Outline in writing, if necessary, the main points you wish to cover.)

2. State your name and reason for calling.

   Example: "Hello, this is Marion Moss and I'm calling about your ad in the *Sometown Daily News* for a dental assistant. May I have an appointment for an interview?"

3. Ask when would be the best time for you to come for the interview.

4. Record the day, time, and place of the interview.

5. Thank the receptionist.

Remember these things when calling for an appointment:

a. Keep the receptionist on your side. He or she is there to help you.

   (NOTE: The receptionist is sometimes asked to evaluate the applicant.)

b. Do not ask over the phone how much the job pays.

c. Be polite and courteous. Remember that this call is the first contact you may have with the firm. Make sure that first impression is a good one.

ASSIGNMENT SHEET #4

Checklist for Demonstration	Yes	No
1. Was prepared before calling	______	______
2. Did not have to stammer to find the right words	______	______
3. Identified self	______	______
4. Stated reasons for calling immediately	______	______
5. Asked the best time for an appointment with the employer	______	______
6. Was courteous and friendly	______	______
7. Thanked the receptionist	______	______
8. Made record of the interview date, hour, and place	______	______

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #5--PARTICIPATE IN A JOB INTERVIEW

NAME ______________________________ SCORE __________

Now that you are prepared for an interview, team up with another student in class. Assume the roles of interviewer and applicant and then switch so each of you gets to play both roles. Apply for the job you now have or the one for which you wrote the letter of application. Let your other classmates evaluate your performance using the job interview evaluation form below. Use the sample interview that follows for your roleplay.

(NOTE: Videotape the practice sessions if possible.)

JOB INTERVIEW EVALUATION FORM

	YES	NO
Preparing for the Interview		
1. Were you clean, well-groomed, and neat?	_____	_____
2. Did you wear appropriate clothes and shoes for the type of job for which you are applying?	_____	_____
3. Did you take an ink pen and resumé with the information you may need about Social Security number, references, addresses, dates employed, and dates attended school?	_____	_____
4. Did you go alone, not taking parents or friends with you?	_____	_____
5. Were you on time for the interview?	_____	_____
6. Did you know the name and title of the interviewer?	_____	_____
7. Did you know pertinent facts about the office, such as name, kind of facility, services, reasons you want to work there, and what specialty areas are available?	_____	_____
8. Did you enter with poise and greet the interviewer by name?	_____	_____
9. Did you shake hands firmly if the interviewer offered her/his hand?	_____	_____
10. Did you introduce yourself and state the purpose of the call?	_____	_____

ASSIGNMENT SHEET #5

	YES	NO
Participating in the Interview		
11. Did you seat yourself only at the interviewer's invitation?		
12. Did you show signs of nervousness?		
13. Did you *not* place personal things on interviewer's desk, smoke, or chew gum?		
14. Did you look alert, interested, and enthusiastic?		
(NOTE: Sit slightly forward in the chair to give an alert appearance.)		
15. Were you confident and courteous?		
(NOTE: Words such as *Mr., Ms., Miss, Mrs., please, thank you*, and *sir* never go out of style.)		
16. Did you answer questions clearly and not interrupt?		
Anticipating Questions and Volunteering Proper Information		
17. Did you avoid just giving all "yes" and "no" answers?		
18. Did you avoid criticisms of former employers or competitors?		
19. Did you avoid talking about personal problems?		
(NOTE: The interviewer must be interested more in what you can contribute to the facility than in what the business can do for you. Do not use a sob story about how desperate you are for a job.)		
20. Did you show copies of your work, if applicable?		
21. Did you state that you are willing to start at the beginning salary?		
22. Did you find a true, positive statement concerning your reasons for leaving previous jobs, even if you were fired?		

Examples: "I was laid off, but I learned from my mistakes."

ASSIGNMENT SHEET #5

YES NO

23. Did you try to mention your best qualities in relation to something concrete? ______ ______

Example: "I earned seventy-five percent of my expenses while going to school" is better than "I am a hard worker and want to get ahead"

24. Did you give the lead back to the interviewer if you found yourself talking too long, by saying, "Perhaps you have some other questions to ask me?" ______ ______

25. Were you prepared for personal questions about your home life and your parents' occupations? ___ ___

(NOTE: Even though these kinds of questions are illegal, you may have to deal with them. Have a suitable answer ready.)

26. Did you avoid questions concerning politics or economics? ______ ______

27. Did you answer questions about career objectives using specific terms about what you would like to do in the near future in your particular field without limiting your opportunities? ______ ______

Example: A career in the health field that will lead to a certification as a dental assistant. No locational perference

28. Did you look directly at the interviewer, smile, use correct English, and speak in clear moderate tones? ______ ______

(NOTE: Avoid swearing or using slang terms.)

29. Did you show an interest in the facility by asking questions about it? ______ ______

30. Did you really try to sell yourself? ______ ______

(NOTE: Never refer to yourself as just average or fair. Always look for a positive response.)

31. Did you remind the interviewer of the conversation topic if he/she is interrupted by a telephone call? ______ ______

ASSIGNMENT SHEET #5

	YES	NO
Closing the Interview		
32. Did you watch for signs that the interview was over, such as the interviewer shuffling papers and moving around in the chair?	_____	_____
33. Did you ask "May I say one thing more?" or "Would you be interested in . . .?" if the interview seemed to be ending before all important selling points had been made?	_____	_____
34. Did you thank the interviewer for his/her time and leave promptly?	_____	_____
Following up the Interview		
35. Did you write a thank you letter, call, or visit again to express interest in the job and appreciation for the opportunity to interview?	_____	_____

(NOTE: EVEN IF THE INTERVIEWER DOES NOT OFFER THE POSITION, YOU SHOULD LEARN FROM EVERY SITUATION AND TRY TO IMPROVE YOUR INTERVIEWING TECHNIQUES.)

ASSIGNMENT SHEET #5

SAMPLE JOB INTERVIEW

(NOTE: Pair up with another student, rehearse this script, and roleplay for the class to show how an interview might be conducted. You may want to write your own script and set up your own simulation of an interview.)

A = Applicant

I = Interviewer

A (Enters, pauses, smiles, and approaches Dr. Smiley and shakes doctor's extended hand.) Hello, I am Virginia Blossom and am applying for the job which you advertised in the *Goodcity Gazette*.

I Hello, Ms. Blossom. Won't you have a seat?

A Thank you. I have a resumé which may be helpful to you. (Hands Dr. Smiley the resumé and sits down.)

I This is a very well-prepared data sheet. Well, Virginia, tell me about your training and experience.

A I completed the dental assistant course in May at the Success Vo-Tech School and worked part time in a group practice in Metropolitan.

I Have you had much experience in working with oral surgery cases?

A Yes, one dentist in Metropolitan did minor oral surgery and I was trained to assist.

I The position here calls for the assistant to do mostly clinical procedures, but you may be called on to assist with clerical duties occasionally.

A I have had the basic training and experience to work with the pegboard record keeping system. I also can type sixty words per minute and use the dictaphone.

I Are you interested in continuing your education? We do like our employees to attend various in-service programs to update knowledge and skills. Of course, we pay the tuition for you to attend.

A Yes, I want to study and take the certification board and become a Certified Dental Assistant with a specialty in six-handed dentistry. I would be more than happy to attend any courses offered.

I When would you be able to begin working for us?

A I am in the process of moving to Goodcity now so I could be ready to begin working for you in a week.

ASSIGNMENT SHEET #5

I Ms. Blossom, it sounds as if you might be just what I am looking for. Why don't you look over this handbook we have made up for our office staff and I will contact you next week. If you have any questions, we can discuss them then. We have excellent benefits here at this office and the salary is negotiable according to your experience.

A Thank you. I will be waiting for your call and I will look over the handbook. (Stands) Thank you for your time, Dr. Smiley. (Shakes hands and leaves.)

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #6--EVALUATE A JOB OFFER

NAME ______________________________ SCORE ____________

Imagine . . . your first job interview is minutes away. Countdown 5-4-3-2-1!

You enter the employer's office . . . Questions . . . Answers . . . You continue to feel nervous inside but appear cool outside . . . Questions . . . More Answers . . . The employer offers you the job!

Grab it? What a relief--no more job interviews! WAIT!!! Instead of saying yes or no on the spot to a job offer, express your gratitude in a warm and friendly manner and then ask if you may have a day to consider the opportunity you have been offered. Few reputable employers will deny you a reasonable time to be certain before agreeing to take a job.

Avoid getting stuck with a job that's wrong for you by using the checklist to evaluate the job offer!

THE JOB . . .

☐ Do I clearly understand the nature of the work and is it what I want to to? Is there a written job description? Are my responsibilities reflected in the job title?

☐ If this isn't my dream job, can it be a stepping stone as I acquire the skills and experience needed for advancement?

☐ Is the background I'm building so narrow that I will have difficulty transferring it to another employer?

☐ Will I be able to make any decisions affecting my work? Do I care?

☐ Will I need more training and will the facility pay for it?

☐ Will overtime be necessary or available?

☐ Will I be able to leave all thought of the job behind at day's end? If not, do I care?

☐ Will I travel or relocate?

☐ Will I be proud to tell my friends what I do?

☐ Is the job permanent or temporary?

☐ If permanent, is there reasonable job security?

☐ Does this job require union membership?

ASSIGNMENT SHEET #6

THE FACILITY . . .

☐ Is the facility too large, impersonal, and rule-oriented for my personality?

☐ Is the facility too small to offer room for advancement or impressive credentials for a future resumé?

☐ Does the facility have a health financial position and is it a growing organization?

☐ Is there a high turnover of personnel and if so, why?

☐ Does the facility promote from within the ranks or turn to outsiders to fill supervisory jobs?

☐ Have I met the person who would be my immediate supervisor?

☐ Does the supervisor seem like the sort of person with whom I could get along?

☐ Do co-workers appear to be my kind of people?

☐ Is the facility's location convenient?

☐ Is the physical setting okay (adequate light, ventilation, cleanliness)?

☐ What is the facility's reputation for fair treatment of employees?

☐ Is a written personnel statement available that covers vacations, sick leave, cause for dismissal, and so forth?

FINANCIAL REWARDS . . .

☐ Do the earnings meet my minimum needs? Are there automatic cost-of-living increases?

☐ What is the method of payment (salary, hourly wage, overtime or shift differential)?

☐ Are raises based on merit, length of service, certification, continuing education hours?

☐ What fringe benefits are given (health insurance, free parking, discount privileges, malpractice insurance, uniform allowance, and others)?

WHEN TO SAY NO . . . Should you always turn down an offer that doesn't measure up?

That depends on several questions. How desperately do you need to earn money? How competitive is the field you hope to enter? Would it be best to get your foot in the door any way you can? How valuable is the experience you'll gain? There are times when it is wise to accept a job which is not perfect in your eyes.

ASSIGNMENT SHEET #6

One the other hand . . . if both your logical thinking and gut feeling are bad, it may be best to say thanks but no thanks, and look elsewhere.

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CAREER SUCCESS
UNIT III

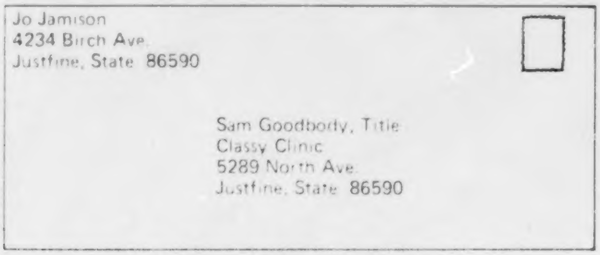
ASSIGNMENT SHEET #7--WRITE A FOLLOW-UP LETTER

NAME ______________________________ SCORE ____________

1. Write a follow-up letter thanking the employer for the interview. Use any form you wish or follow the format of the sample follow-up letter included in this assignment sheet.
2. Make sure your letter meets the following standards:
   - a. Typed or written perfectly
   - b. Clean, neat, and attractively arranged on the paper
   - c. Free from spelling, punctuation, and grammatical errors
   - d. Sent within a day or two after the interview
3. Include the following points in your follow-up letter:
   - a. Expression of appreciation for interviewer's time and interest
   - b. Summary of your qualifications and interest in that position
   - c. Your name, address, and phone number (to make it easier for your employer to contact you)
4. Make this last bid for the job a prime example of your excellent work habits. Make the letter as clean, neat, and well-worked as you possible can
5. Address a legal-sized envelope (Figure 1)

   (NOTE: Be sure and type the address EXACTLY the same as the inside address of the letter.)

FIGURE 1



Jo Jamison
4234 Birch Ave.
Justfine, State 86590

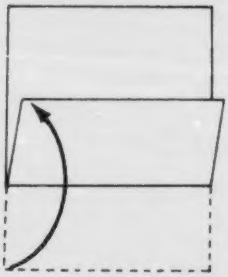
Sam Goodbody, Title
Classy Clinic
5289 North Ave.
Justfine, State 86590

ASSIGNMENT SHEET #7

6. Fold letter

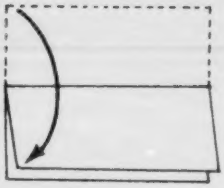
   a. Fold slightly less than one-third of the letter toward the top (Figure 2)

FIGURE 2



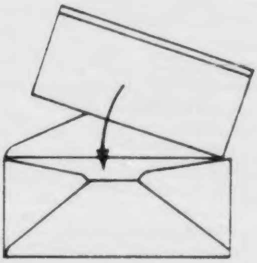
   b. Fold down the top of the letter to within 1/2" of the bottom fold (Figure 3)

FIGURE 3



7. Insert the letter into the envelope with the first crease toward the botton of the envelope (Figure 4)

FIGURE 4



ASSIGNMENT SHEET #7

SAMPLE FOLLOW-UP LETTER

4234 Birch Ave.
Justfine, State 87590
Date

Dr. Sam Goodbody
Classy Clinic
5289 North Ave.
Justfine, State 86590

Dear Dr. Goodbody:

Thank you for interviewing me for the job as dental assistant in your office. I feel that the opportunity and learning experience would be excellent for me and hope that I will have the opportunity to assist you and your staff.

Enclosed you will find the application form you gave to me.

I will be available for work May 1. You may call me at my home after 4:00 p.m. My telephone number is 425-1144.

Sincerely yours,

Jo. Jamison

Jo Jamison

Enclosure

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #8--COMPARE JOB OPPORTUNITIES

NAME ______________________________ SCORE ____________

When you are offered a job or are changing jobs, there are many factors to weigh before taking the position. Some of these include:

- What is your take-home pay?
- What are the benefits which accompany the job?
- How much will it cost to actually be at work each day?
- Would the job be satisfying to you?
- How would the job meet your needs and aspirations?

WHAT'S MY TAKE-HOME PAY?

Salaries and wages are often quoted by employers as gross earnings. Gross earnings are used because tax deductions vary due to the number of dependents, the amount of earnings, and other information.

Optional benefits and deductions offered by an employer also differ. It is generally advisable to ask what programs are available for enrollment as these can affect the actual money you receive on payday.

WHAT OTHER BENEFITS DO I GET FROM THIS JOB?

Some benefits associated with working are not always visible. Often some of these overlooked benefits are paid for in part by your employer. At the time of the interview or when considering a position ask about them.

Employer's contributions for your protection may include:

- Health insurance
- Malpractice insurance
- Profit sharing
- Credit union
- Unemployment compensation
- Worker's clothing
- Dental facilities
- Pensions

ASSIGNMENT SHEET #8

- Travel insurance (covering mishaps when traveling on business)
- Education programs or reimbursement for courses related to job
- Sick leave with pay
- Paid vacations and holidays
- Discount privileges

Example: Dental work

WHAT WILL IT COST TO WORK AT THIS JOB?

We often overlook the costs which are associated with being employed. It may be of value to calculate estimated weekly expenses before you make a decision about a job.

Estimate weekly expenses for:

Transportation	$__________	Gifts for other employees	$__________
Lunches (or cost of food eaten away from home, including soft drinks and coffee)	$__________	Special materials, uniforms, or equipment for the job	$__________
Clothing (including cleaning)	$__________	Other	$__________
Child care for working parent	$__________	TOTAL:	$__________

WHAT'S IMPORTANT TO YOU IN A JOB?

Take home pay and benefits may be only part of what you want from a job. Think through what other things you consider important in a job.

What are some of the most rewarding things you've felt about any job you've ever done?

1. ____
2. ____
3. ____

ASSIGNMENT SHEET #8

On a scale of 1 to 10, how might you rate these in order of what's important to you?

_____ Job security (little chance you'll be released from the job)

_____ Opportunity for advancement

_____ Recognition for your work

_____ Good wages

_____ Opportunity to learn and use your ideas

_____ Flexible working hours and long vacations

_____ Pleasant working conditions

_____ Interesting work

_____ Friendly co-workers

_____ Other, such as ____________________

ARE YOU READY TO DECIDE???

Now try to take all the information you have gathered and summarize it below to reach a decision about whether you want the job or not.

1. Would the job be satisfying to you? Why or why not?

____

____

____

2. What are the benefits which accompany the job?

____

____

____

3. How much will it cost to actually be at work each day?

____

____

____

ASSIGNMENT SHEET #8

4. How would the job meet your needs and aspirations?

____

____

____

5. I estimate my take-home pay to be $____________.

6. I estimate my expenses related to working to be $____________.

7. I would most enjoy ____

____

____

8. I estimate my job benefits to be worth $____________.

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #9--ASK FOR A RAISE

NAME ______________________________ SCORE ____________

Asking for a raise . . . the ideal situation exists when true merit is recognized and never needs to be called to the employer's attention. If your situation is not ideal, what can you do? Obviously, there is only one answer: you must bring the matter up; you must ask for a raise.

Use the guidelines below to role play asking for a raise with another student or a resource person provided by your teacher.

1. BEFORE YOU SPEAK AT ALL, PRECEDE YOUR REQUEST WITH CONSIDERABLE THOUGHT AND STUDY.
2. Determine if you are justified in asking for a promotion or a raise by making out a good case for yourself in writing. BE OBJECTIVE!!

   Examples: What about your production?

   Is there a standard for your work in your office?

   If so, how does your production compare with this standard?

   How many mailable letters do you transcribe in an hour?

   How many patients have you handled without a complaint?

   What additional skills have you acquired since you were hired?

   If you were to take an employment test at this point, would you do significantly better than on the one you took when you applied for your job?
3. Check your attitudes and work habits.

   Examples: Are you always prompt in arriving for work?

   Do you work overtime without complaint when it is necessary?

   How many days of work have you missed because of illness?

   Are you considered cooperative by your supervisors and your co-workers?

   When you finish the work assigned, do you find something else to do?
4. Ask your employer for an appointment.

ASSIGNMENT SHEET #9

5. Bring your notes with you to your interview.

   Example: "______________, I have enjoyed my work here very much. You may be interested in the progress I have made since I was hired two years ago."

6. Explain the progress.

   (NOTE: If you are confident of your worth, you will be able to respond pleasantly to any gruffness or lack of enthusiasm on your employer's part. If the employer challenges your statements, see that you neither back down nor become defensive. Simply and calmly bring up the case that you have prepared. After all, it is merely another employment interview, and you passed the first one.)

7. Thank you employer for the interview and for the time spent.

8. Leave.

   (NOTE: Go back to your work and be patient. Even if the dentist has seemed impressed with your facts, you must not expect your raise to be forthcoming at once. The employer may intend to grant your request after conferring with other members of the firm. DON'T RUIN A GOOD CASE BY BECOMING A NUISANCE.)

9. Ask your dentist if any decision has been made after two weeks.

   (NOTE: KEEP YOUR TONE FRIENDLY BUT IMPERSONAL! TOO MUCH EMOTION HAS RUINED MORE THAN ONE GOOD CAUSE. Even though you may deserve a raise, circumstances, such as budget, may prevent your dentist from giving you a raise.)

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #10--WRITE A LETTER OF RESIGNATION

NAME ______________________________ SCORE __________

It is not unusual for a person to change jobs a number of times before finding a position regarded as permanent. Part of total career success involves notifying your present employer of your departure in a positive way. How do you leave with a good impression?

Sometimes a letter is necessary because of the time involved or the difficulty of arranging an appointment before or after hours. If notice can be given in person, you should do so. It is a forthright, open-handed, and natural method. It usually takes a little time, but it affords the opportunity for a discussion which could lead to improved understanding and perhaps other advantages.

A good letter of resignation, including one that merely confirms a conversation, has many possible advantages. Written in a spirit of friendliness and cooperation, it can be a valuable addition to your personnel file. Later on, if supplying a recommendation, a dentist may wish to see your file to refresh his/her memory about you. Your "exit" letter will show that you apparently left on friendly terms and gave notice in writing. Under the principle of "all's well that ends well," the letter may cause a better recommendation than would otherwise be written. It can also provide a favorable climate for you to rejoin the office, if unforeseen events bring you back to the door.

Use the guidelines below and the sample letter to write a letter of resignation.

1. Address the letter to the dentist or the person in charge if it is a group practice.
2. Imply that your departure will be an inconvenience.
3. Begin with a statement that will be of interest and will appeal to your reader.

   Examples: Show appreciation for the months/years of employment under this office's management

   Acknowledge the confidence placed in you by various advancements

   Comment on the rewarding experience you have acquired under the dentist's or supervisor's direction

   (NOTE: The purpose of this is to place your reader in a relaxed frame of mind so that she/he will be receptive to the message to follow.)

4. Give positive reasons for going to the new job; avoid negative reasons for leaving the job.
5. Mention the name of the new employer and the position you are to fill.

ASSIGNMENT SHEET #10

6. Give an appropriate time notice.

   (NOTE: This time interval should be reasonable enough to allow the office to get a suitable replacement. There is no set time that can be quoted--sometimes a month, sometimes an even longer period of time. Usually the higher you are in the organization, the more likely it is that you should give notice of a month or more.)

7. End on a constructive or encouraging note.

   Examples: Request a personal interview to explain in great detail

   Offer to extend the departure date, if possible, while a replacement is being found

   Suggest a possible replacement if that is not presumptuous

   Simply offer to be available to help in the transition as you are needed

DA - 245-H

ASSIGNMENT SHEET #10

July 1, 19--

R. Redford, D.D.S.
Busy Dental Center
1313 Galloway
Metropolitan, Oklahoma 12345

Dear Dr. Redford:

Two weeks ago I had no idea that I might be writing you this letter. I must say my two years here at the Busy Dental Clinic have been rewarding and valuable. I appreciate all the guidance and educationai opportunities given to me.

Last week, however, I received a excellent job offer which will enable me to progress in the field of education. Placid Adult Education Center in my home town of Success has offered me the job as an instructor in their dental assistant program.

I have always wanted an opportunity to teach and I will be attending Success University to continue my education.

I have decided to accept the offer and will be moving to Success on Month, Day, Year. That will give you time to find someone to be trained for my position. In the month before I leave I can assist in training the new assistant in operative procedures.

If there is anything else I can do to help the office prepare for my departure, I shall be happy to be of service.

Respectfully yours,

Diana Kelly

Diana Kelly

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #11--EVALUATE PERSONAL HABITS ASSOCIATED WITH CAREER SUCCESS

NAME ____ SCORE ______________

Good habits are necessary in order to establish good human relations and a good relationship with co-workers, employer, and clients. Complete the evaluation below and then answer the questions that follow.

(NOTE: If you have not yet been employed, base your evaluation on "work situations" in classroom situations.)

	YES	NO
WORKING WITH CO-WORKERS (OR STUDENTS)		
Do you do your own work and not leave it for someone else to do?	_____	_____
Do you clean up after yourself?	_____	_____
Are you willing to learn from others about how to do a job better?	_____	_____
Do you contribute to morale and team spirit at a place of business?	_____	_____
Do you learn names of people with whom you work as soon as possible?	_____	_____
Do you take a sincere interest in co-workers, their families, and their interests?	_____	_____
Are you a good listener?	_____	_____
Do you admit mistakes without making excuses?	_____	_____
Do you assume blame for things that are your fault?	_____	_____
Do you avoid gossip?	_____	_____
Do you support co-workers?	_____	_____
WORKING WITH EMPLOYER (OR TEACHER)		
Are you cheerful?	_____	_____
Do you feel your job is a privilege, not a right?	_____	_____
Do you try always to do the best you can?	_____	_____

ASSIGNMENT SHEET #11

	YES	NO
Do you know your job?	____	____
Are you on the job unless excused?	____	____
Are you on time and ready to work?	____	____

(NOTE: Do a day's work for a day's pay!)

	YES	NO
Do you try to avoid waste of all kinds (material, time, equipment)?	____	____
Do you look for a better way to do the job?	____	____
Do you tell the truth and are you sincere?	____	____
Do you ask questions when you need help?	____	____
Do you try to see the employer's side when there is a problem?	____	____

WORKING FOR PATIENTS

	YES	NO
Do you know what is expected of you and do you do your job well?	____	____
Do you give professional treatment to patients?	____	____
Do you keep promises made to patients?	____	____
Are you polite to patients?	____	____
Are you sincere?	____	____
Do you smile?	____	____
Are you friendly, interested, and sympathetic?	____	____
Do you gain the patient's confidence and listen?	____	____
Do you try not to rush the patients?	____	____
Do you avoid arguing with an angry patient?	____	____
Do you avoid comments that might upset a patient?	____	____
Do you refer matters you cannot handle to a supervisor?	____	____
Do you treat each patient as an individual?	____	____
Do you take pride in winning a patient's friendship?	____	____

ASSIGNMENT SHEET #11

1. What do you feel are your strengths in personal habits associated with job success?

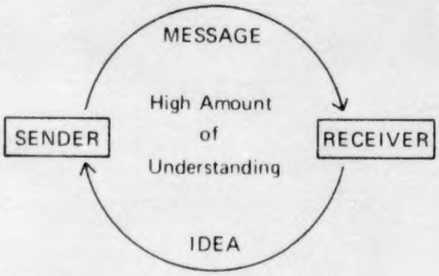
2. What do you feel are your weaknesses in personal habits associated with job success?

CAREER SUCCESS
UNIT III

ASSIGNMENT SHEET #12--IMPROVE LISTENING SKILLS

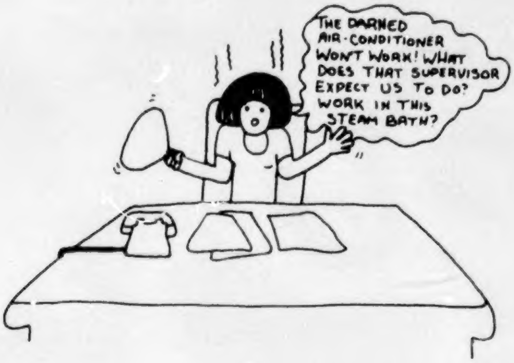
NAME ______________________________ SCORE __________

Communication is the sharing of a message or an idea which results in a high amount of understanding between the sender and the receiver of the message.


MESSAGE
SENDER
High Amount of Understanding
RECEIVER
IDEA

SHARING AND UNDERSTANDING ARE THE KEY WORDS!!! MEANINGS ARE IN PEOPLE, NOT IN WORDS.

Listening is one key to effective communication! Effective listening requires two skills: the ability to listen for facts and the ability to listen for feelings. Listening for facts comes more naturally than listening for feelings!


THE DARNED AIR-CONDITIONER WON'T WORK! WHAT DOES THAT SUPERVISOR EXPECT US TO DO? WORK IN THIS STEAM BATH?

1. What are the facts in the above message?

____

____

____

ASSIGNMENT SHEET #12

2. What are the feelings in the above message?

____

____

____

(NOTE: When a person's expessed feelings are ignored the first time around, that person will usually make a second attempt to express them. LISTEN!!!)

This activity will give you practice in listening for feelings as well as for facts. Remember that most people can get the facts in a message. It is more difficult to listen for feelings. However, the true message lies in the combination of both the facts and the feelings.

Four students--two pro and two con--should debate the following statement: Capital punishment reduces the crime rate. Listen to the arguments and then answer the following questions.

1. What problems come up when the opposing side forgets to listen for feelings?

____

____

____

2. Why is it difficult to get agreement on value statements?

____

____

____

3. How often did the opposing side mistake feelings for fact?

____

____

____

4. Why is it more difficult to find proof for value statements than for statements of fact?

____

____

____

ASSIGNMENT SHEET #12

5. What communication barriers arise when false opinions and feelings get in the way of listening?

6. Did the audience let their own sentiments and attitudes affect the way they heard the argument?

Adapted with permission from *Human Relations in Business*. Dallas: South-Western Publishing Co., 1977.

CAREER SUCCESS
UNIT III

TEST

NAME ____ SCORE_____________

1. Match the terms on the right to the correct definitions by placing the correct numbers in the blanks provided. (Answers to "a" through "j" are on this page.)

______a. Advertisement telling what kind of job is available and what qualifications are required

______b. Printed form on which job applicant records information about personal history, job history and experience, education, and references

______c. Written statement or summary of information about an individual that would be of interest to a prospective employer; may also be referred to as personal data sheet

______d. Business designed to help individuals find employment

______e. Code or standard of behavior; professional conduct

______f. Feelings about people, things, and ideas

______g. Classified advertisement that does not identify the advertiser

______h. Action that is acquired and has become automatic; thendency to perform a certain action

______i. Meeting of prospective employer and job applicant for evaluation and questioning

______j. Continuous process of getting along with people

1. Employment application form
2. Employment agency
3. Habit
4. Attitude
5. Resumé
6. Blind ad
7. Help wanted ad
8. Ethics
9. Interview
10. Human relations

______k. Classified advertisement placed by individual seeking employment indicating the job seeker's qualifications

______l. Information about a job and the skills needed to adequately perform it

______m. On-going alertness for any new knowledge or training

______n. Sharing of a message or idea which results in a high amount of understanding between the sender and the receiver of the message

______o. Activity designed for technical development and worker improvement; may be in the form of seminar, workshop, or short conference

______p. Policy that covers health worker in case of accident or injury to person receiving care

11. Learning attitude
12. Liability insurance
13. Communication
14. Technical knowledge
15. Job enrichment program
16. Employment/situation wanted ad

2. Arrange in order steps to take in finding and securing a job. Place a "1" for the first step, a "2" for the second step, and so on in the blanks provided.

______a. Estimate salary

______b. Make a list of possible contacts to help you in your job search

______c. Write down a complete self-inventory

______d. Prepare for a job interview

______e. Make a list of employer possibilities

3. Name sources of employment opportunities.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

h. ____

4. Distinguish between private and public employment agencies. Write a "PR" for private agency and a "PU" for public agency operations in the correct blanks. (There may be more than one correct answer for each blank.)

   ______a. Do not charge placement fee for services

   ______b. Are controlled by state laws

   ______c. Give aptitude tests and counseling if needed

   ______d. Collect fee when employment is secured

   ______e. Are supported by state or federal government funds

   ______f. Charge placement fee for services

   ______g. Request signed contract between you and agency

5. Select from the list below guidelines for dressing for an interview. Mark each correct answer with an "X."

   ______a. Consider type of job

   ______b. Wear high fashion clothes

   ______c. Dress to fit salary range above the one in which you expect to be employed

   ______d. Consider age of interviewer

   ______e. Wear a uniform

   ______f. Dress to get the interviewer's attention

   ______g. Be well-groomed

   ______h. Dress casually because interviews tend to be informal

6. Discuss ways to increase self-satisfaction in a career.

   ____

   ____

   ____

   ____

   ____

   ____

7. Select from the list below reasons why people lose jobs. Mark each correct answer with an "X."

   ______a. Low dedication to work ethic

   ______b. Being assertive and making suggestions

   ______c. Assuming more responsibilities

   ______d. Poor human relations and attitude

   ______e. Lack of technical knowledge

8. List ways to continue education in a chosen field.

   a. ____________________

   b. ____________________

   c. ____________________

9. Prepare a resumé.

10. Write a cover/application letter.

11. Complete an employment application form.

12. Use telephone to arrange a job interview.

13. Participate in a job interview.

14. Evaluate a job offer.

15. Write a follow-up letter.

16. Compare job opportunities.

17. Ask for a raise.

18. Write a letter of resignation.

19. Evaluate personal habits associated with career success.

20. Improve listening skills.

(NOTE: If activities 9-20 have not been finished before the test, ask the instructor when they should be completed.)

CAREER SUCCESS
UNIT III

ANSWERS TO TEST

1. a. 7
   b. 1
   c. 5
   d. 2
   e. 8
   f. 4
   g. 6
   h. 3
   i. 9
   j. 10
   k. 16
   l. 14
   m. 11
   n. 13
   o. 15
   p. 12

2. a. 5
   b. 3
   c. 1
   d. 4
   e. 2

3. a. Other people
   b. Newspaper
   c. Employment agencies
   d. Former employers
   e. Personnel offices of health facilities
   f. School placement services
   g. Professional journals and newsletters

4. a. PU
   b. PR, PU
   c. PU
   d. PR

   e. PU

   f. PR

   g. PR

5. a, d, g

6. Discussion should include:

   a. Have a positive attitude

   b. Be enthusiastic

   c. Keep an open mind

   d. Read all the journals, newsletters, and textbooks available that pertain to your profession

   e. Join and be active in your professional organizations

   f. Volunteer to attend any workshops or in-service programs that your facility might offer

7. a, d, e

8. a. In-service programs

   b. Junior colleges and universities

   c. Courses offered by professional organizations

9. Evaluated to satisfaction of instructor

10. Evaluated to satisfaction of instructor

11. Evaluated to satisfaction of instructor

12. Evaluated to satisfaction of instructor

13. Evaluated to satisfaction of instructor

14. Evaluated to satisfaction of instructor

15. Evaluated to satisfaction of instructor

16. Evaluated to satisfaction of instructor

17. Evaluated to satisfaction of instructor

18. Evaluated to satisfaction of instructor

19. Evaluated to satisfaction of instructor

20. Evaluated to satisfaction of instructor